

# **FIRST ANNUAL REPORT**

**Africare**

**Community Based Integrated Management of Childhood Illnesses (CIMCI)  
Plus Project**

**Ntungamo District, South Western Uganda**

**October 1, 2003 to September 30, 2008**

**Cooperative Agreement # FAO-A-00-99-00025-00 No.02**

**Submitted by:**

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**To:**

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## ACRONYMS

|         |  |
|---------|--|
| ABC     | Abstinence, Be faithful and Condom                           |
| ADRA    | Adventist Development and Relief Agency                      |
| AED     | Academy for Education Development                            |
| AIC     | AIDS Information Center                                      |
| AIDS    | Acquired Immune Deficiency Syndrome                          |
| AIM     | AIDS Integrated Model District                               |
| AMREF   | African Medical & Research Foundation                        |
| APHA    | American Public Health Association                           |
| BASICS  | Basic Support for Institutionalizing Child Survival          |
| BCC     | Behavior Change Communication                                |
| BCCS    | Behavior Change Communication Specialist                     |
| CBO     | Community-based Organizations                                |
| CCA     | Community Counseling Assistants                              |
| CCF     | Christian Children's Fund                                    |
| CHIS    | Community Health Information System                          |
| CIMCI   | Community-based Integrated Management of Childhood Illnesses |
| CO      | Country Office   |
| CORE    | Child Survival Collaborations and Resources Group            |
| CORPS   | Community Own Resource Persons                               |
| CR      | Country Representative                                       |
| CSHGP   | Child Survival and Health Grants Program                     |
| CSTS    | Child Survival Technical Support                             |
| DDHS    | District Director of Health Services                         |
| DHT     | District Health Team   |
| DIP     | Detailed Implementation Plan                                 |
| DISH    | Delivery of Improved Services for Health                     |
| EPI     | Expanded Program on Immunization                             |
| FBO     | Faith Based Organization                                     |
| GH/HIDN | Global Health/Health Infectious Diseases Nutrition           |
| GOU     | Government of Uganda   |
| HACH    | Hands on Child and Health Project                            |
| HIV     | Human Immune Virus   |
| HQ      | Headquarters   |
| IEC     | Information Education Communication                          |
| IMCI    | Integrated Management of Childhood Illnesses                 |
| ITN     | Insecticide Treated Nets                                     |
| ISAE    | Institute of Statistics and applied Economics                |
| KPC     | Knowledge, Practice and Coverage                             |
| LQAS    | Lot Quality Assurance Sample                                 |
| M&E     | Monitoring and Evaluation                                    |
| MISAE   | Makerere Institute of Statistics & Applied Economics         |
| MISR    | Makerere Institute of Social Research                        |
| MACIS   | Malaria and Childhood Illness Secretariat                    |
| MEMS    | Monitoring and Evaluation Management Services                |

|      |   |
|------|---|
| MIHV | Minnesota International Health Volunteers |
| MOH  | Ministry of Health                        |
| MSI  | Management Services International         |
| MSP  | Multi Sectoral Platform                   |
| MTE  | Midterm Evaluation                        |
| MOU  | Memorandum of Understanding               |
| NGO  | Non Government Organization               |
| NDHS | Ntungamo District Health Services         |
| ORS  | Oral Rehydration Solution                 |

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### ANNEXES

Annex 1: Revised CSHGP Data Form

Annex 2: Revised Detailed Implementation Plan

Annex 3: Revised Knowledge Practices and Coverage Survey Report

## 1. INTRODUCTION

This report presents information on the activities accomplished by Africare for the first year (October 1, 2003- September 30, 2004) of implementing a child survival project. With a grant from the United States Agency for International Development (USAID), Africare implemented a four years (October 1, 1999-September 30, 2003) Community - based Integrated Management of Childhood Illness (CIMCI) project phase one in Ntungamo District of South Western Uganda. The project was operating in the eight of the District's fifteen sub-counties with a target population of 42,054 children under five and 46,058 women of reproductive age. The overall project goal was to reduce morbidity and mortality of children under five years.

In the Cost Extension category, Africare was awarded another grant from USAID/GH/HIDN's Child Survival and Health Grants Program (CSHGP) to support a five-year extension of its CIMCI project – CIMCI-Plus. The project will run from October 1, 2003 through September 30, 2008.

The CIMCI-Plus project is being implemented in the remaining seven sub-counties of Ntungamo District that include: Nyakyera, Itojo, Ruhama, Kayonza, Rugarama, Bwongyera and Ihunga. CIMCI-Plus targets **82,091** new beneficiaries comprised of **39,180** children under five and **42,911** women of reproductive age. In addition it will indirectly benefit an estimated **104,476** people.

The goal of the CIMCI-Plus project is to reduce morbidity and mortality of children under five and improve the health status of women of reproductive age in Ntungamo District by end of 2008.

To reach the goal, CIMCI- plus has four general objectives:

- To promote knowledge and behavior related to the prevention of childhood illnesses, at household and community levels,
- To improve home management of the sick child by promoting timely and appropriate care seeking at household and community levels,
- To improve accessibility of under five children and women of reproductive age to quality health services and products, both at facility and community levels, and
- To strengthen national and district MOH capacity to replicate and sustain the community IMCI approach.

CIMCI-Plus focuses on five intervention areas: malaria (35%); immunization (25%); HIV/AIDS (15%); nutrition, breastfeeding and micronutrients (15%); and diarrhea (10%). The project is building on the achievements and lessons learned from the first phase.

The main activities and accomplishments of the program during the report period include: (i) Signing a memorandum of understanding with the District; (ii) conducting the baseline

KPC Survey; (iii) writing the Detailed Implementation Plan (DIP) and its presentation to USAID for review; (iv) recruitment and posting of Field Officers to respective sub-counties; (v) participating in the district mass measles immunization campaign; (vi) commemoration of the World AIDS Day; (vii) participating in conferences, workshops and meetings at national and international levels; (viii) hosting visitors from the Africare Country office, Ministry of Health, Africare/Washington (Health Program Manager), USAID/Washington (Child Survival Grants Advisor), and the Hilton Foundation (Program Officer); (ix) Placement of American intern with the project; (xii) organizing sub-county stakeholders sensitization workshops; and (xiii) Participation in the Day of the African Child.

As in Phase I, both the political and administrative leaders as well as community members in Ntungamo District received CIMCI-Plus with enthusiasm. They have pledged their commitment and are actively involved in project start up activities.

## **2. ACCOMPLISHMENTS**

### **2.1 Signing of a Memorandum of Understanding (MOU)**

On April 14, 2004, Africare signed a memorandum of understanding with Ntungamo District leadership. The District Chairperson, in his remarks, thanked Africare for the job well done under CIMCI phase I that covered eight of the fifteen sub-counties and promised continued support and advocacy of the activities during the CIMCI second phase.

### **2.2. CIMCI-Plus KPC Baseline Survey**

Following the recommended WHO/EPI 30 cluster sampling methodology, the project in partnership with the Ntungamo District Health Services (NDHS) conducted the baseline survey in January 2004. The survey obtained information from 304 mothers with children under five years to set indicators for measuring progress of the project at mid term and final evaluation. However, based on the recommendation of USAID/Washington Child Survival and Health Grants Technical Advisor during her site visit to the project in August 2004, the data were re-analyzed to only capture data for children less than two years of age on a one-child-one-mother basis. The reason for the re-analysis is to standardize data for all USAID funded child survival projects to allow easy comparison across projects. A revised KPC report is attached in **Annex 3**.

### **2.3. DIP Writing**

The CIMCI-Plus Detailed Implementation Plan (DIP) was a result of concerted efforts by Africare and Key partners. Africare initiated the participatory process of DIP preparation in October 2003 that started with establishing effective partnerships with a plethora of stakeholders to create a common vision and strengthen partner links. The partners that were consulted include; the Ntungamo District Health Team, District and sub-county leaders, Community Own Resource Persons (CORPS), USAID Mission, the IMCI Unit of the Ministry of Health, Makerere Institute of Social Research (MISR) and partner NGOs. The DIP was developed in line with CIMCI national policy and implementation guidelines and CSTS technical reference materials.

#### **2.4. Recruitment and Posting of Field Officers**

During the reporting period, the project recruited staff to fill vacant positions namely Research/Monitoring and Evaluation (R/M&E) Officer and four Field Officers to work in the new sub-counties. The staff were oriented and posted in their respective sub-counties to embark on start up activities of identifying and interacting with structures plus organizing community meetings to introduce the project.

#### **2.5. National Immunization Days against Measles**

From October 15 to 19, 2003, Africare joined Ntungamo District in the campaign to increase the national measles coverage. The exercise targeted children aged 6 months to 15 years. The activities involved holding a series of planning meetings with district officials and Africare staff actively participated in community mobilization and awareness creation about the exercise. The public address system at Africare-World Space HIV/AIDS project sites was used as a major mobilization tool. This combined effort yielded an impressive performance whereby Ntungamo District ranked among the best with 109% coverage.

#### **2.6. Participation in World AIDS Day**

On December 10, 2003, Africare joined Ntungamo District in the colorful function that took place at Kayonza sub-county headquarters to commemorate the World AIDS day. Africare staff worked closely with district staff in organizing one-week awareness creation activities using drama and film shows to educate communities on HIV/AIDS prevention, support and care. The theme of day was *“Stigma and Discrimination: Reach out to Positive People”*. At the same function, a stall that depicted Africare activities in the district was organized.

#### **2.7. Participation in the Day of the African Child**

This year's national celebrations for the day of the African child (June 16, 2004) were held in Ntungamo District. Africare actively participated in ensuring success of this day together with Ntungamo District and other development partners. The theme of the day was *“The African Child and Family: Child Rights and HIV/AIDS”*. The guest of Honor, Minister of State for Gender, Labor and Social Development in charge of Youth, commended Africare for the work done to improve the health and social welfare of children. Africare's Country Representative attended the function.

#### **2.8. Participation in Youth Health Fair**

Building partnerships with other NGOs doing similar activities is one of Africare's strength in promoting community-based health care activities. On May 28, 2004, Africare joined hands with Straight Talk Foundation (STF) a national reproductive health NGO to launch *“Tusheshure”* a newsletter translated by STF into the local languages (Runyankore/Rukiga) to disseminate information on HIV/AIDS and reproductive health issues to rural communities. The key messages in the issue that was launched included; importance of abstinence, voluntary counseling and testing, positive living and HIV/AIDS prevention measures with emphasis on condom use. About 1000 issues of *“Tusheeshuure”* were given to Africare staff to distribute to communities.

## **2.9. Compilation of an inventory for community resources/structures**

As part of gaining entry into the new communities, the Field staff conducted an exercise of identifying and documenting the existing structures/resources to assist in the implementation of CIMCI-Plus. These included: 900 Community Own Resource Persons (CORPs), 100 Parish Development Committees (PDCs), 150 Traditional Birth Attendants (TBAs), 30 women groups, 7 school drama clubs and 36 shopkeepers. In addition to providing useful planning information, the exercise helped in partnership building with respective communities and helped the field staff settle in for smooth implementation.

## **2.10. CIMCI-Plus Staff orientation workshop**

A two-day staff orientation workshop was organized December 22 to 23, 2003 with three main objectives: (1) To enable staff to review the CIMCI phase 1 implementation process so as to build on what worked well and design strategies to improve on weaker areas during CIMCI-Plus; (2) To brief them on CIMCI-Plus goal and objectives and key implementation strategies; and (3) To discuss how to utilize Africare's integrated community approach to enhance the CIMCI-Plus project. The workshop was instrumental in preparing the staff to effectively implement the project using key approaches.

## **2.11. Sub-county stakeholders' sensitization workshops**

Sub-county stakeholders' sensitization workshops have been held in all the seven CIMCI-Plus sub-counties as part of the start up activities to mobilize the local leadership support, advocacy, ownership and sustainability of the activities once the project ends. The participants are strategically selected; they included district councilors, sub-county local council officials, sub-county chiefs, parish chiefs, local council II chairpersons, religious leaders, school representatives, local CBOs/FBOs, health workers sub-county extension staff, and opinion leaders. The major objectives of these meetings were to: (1) sensitize the sub-county stakeholders about CIMCI-Plus goal, objectives, intervention areas and importance of the project; (2) discuss the roles and responsibilities of different stakeholders in meeting CIMCI-Plus objectives; and (3) share and learn from CIMCI phase I experiences and how these can help accelerate the implementation process. In total, 349 sub-county stakeholders have been sensitized in the seven sub-counties and are already working closely with Africare staff to sensitize communities and act as role models in their respective communities.

## **2.12. Stakeholders planning meeting**

As part of building partnerships and buy-ins for CIMCI-Plus, on April 7, 2004, the project staff held a stakeholders meeting attended by NDHS staff and other relevant district departments, the Deputy National IMCI coordinator (MOH) and NGO partners.

The key objectives of the meeting were to: (1) brief the participants about the CIMCI-Plus project; (2) introduce participants to the Detailed Implementation Plan (DIP) writing process, review the key sections of the DIP; and (3) review the baseline Knowledge Practice and Coverage (KPC) survey results and participate in revising the indicators and setting targets.



### **2.13. Staff Review Meeting**

On September 10, 2004, a staff review meeting was held with the objective of sharing information on progress since inception of CIMCI-Plus and supplementary projects plus updating staff on technical aspects. It was also a form of internal capacity building to upgrade staff skills in preparing and making presentations. Deliberations were made on how to improve work performance.

### **2.14. Familiarization and Awareness Creation Meetings**

The Field Officers introduced Africare and the CIMCI-Plus project in the new seven sub-counties by utilizing Council meetings as suitable fora. In general, 35 CIMCI familiarization meetings were held at parish and village level. In each parish, 45 people that included parish councils, women councils, investment committee members, religious and opinion leaders were met. At the village level, all community members were invited and an average of 58 people attended each meeting. During the meetings, the goal, objectives, roles and responsibilities of different stakeholders in the implementation of CIMCI-Plus were discussed.

Another popular strategy that has been used in disseminating child survival messages is community drama. During the reporting period, 14 drama groups composed of women, men and children have been oriented in CIMCI messages in the 7 Sub-counties and over 30 drama shows staged. These have attracted approximately 10,500 people of whom 5,027 are women and the rest men and children. In addition 640 community health education sessions have been conducted and they attracted 15,088 people. Over 6500 copies of Information Education and Communication materials that included health matters, mothers yellow cards, signs and symptoms of diseases and 16 key family practices were distributed. Sixteen video shows that attracted 5,278 people were conducted; 3648 condoms were distributed in busy trading centers in Bwongyera Sub-county and Itojo; and at least 818 home visits were conducted to assess the practice of household behaviors.

We are happy to report that communities have started translating the messages into action. Since October 2003, 11 mosquito net clubs have been formed and over 250 ITNs have been purchased through pooling resources to improve their purchasing power. However the demand created is currently not met due to lack of a steady supply of reasonably priced ITNs. The project therefore facilitated the subsidization of the nets through consultations with private suppliers. Another form of action witnessed on the ground is that after carrying out 104 demonstrations for simple hand washing facilities, over 35 families have adopted the technology to improve their hygiene and sanitation. In addition, five rabbit breeding centers have been established and stocked with local breeds; three VCT outreaches were supported during which 84 people received VCT services; and one PMTCT outreach was supported.

### **2.15. Intern Placement with Africare/Ntungamo**

The Africare/Ntungamo community integrated projects continue to attract a lot of attention at national and international level. From October 27 to December 5, 2003 the project received a student intern from Cornell University on a study mission. The

objective of her placement was to have a greater understanding and analysis of the factors that have led to poor health and lack of development in rural areas. She visited several project sites and held discussions with different groups and leaders from the community to the district levels. Among the groups she visited was a rural women's association called Hands on Child Health Project (HACH) in Rukoni one of the CIMCI Phase I sub-counties. She was impressed by their work and she supported the group with five local goats as a revolving income generation project in their struggle to sustain child survival activities.

### **3. CONFERENCES, WORKSHOPS AND MEETINGS ATTENDED:**

**(i) CIMCI Review Meeting for United Nations Supported Countries, October 7-10, 2003.** The meeting took place at Hotel Africana, Kampala and was attended by Ministry of Health officials from 14 African Countries, UNICEF and WHO officials. The purpose of the meeting was to share progress reports to date since the CIMCI strategy was introduced and to deliberate on the way forward. Africare was specially invited to share its success story in implementation of community component of IMCI. As such a paper entitled "Application of a multi-sectoral platform in maximizing child survival gains: Africare/Ntungamo District Experience" was presented. It was recommended by the workshop participants that those countries and NGOs that have gained hands on experience should document and share information with others in the initial stages to accelerate the implementation process.

**(ii) The 131<sup>st</sup> American Public Health Association (APHA) annual general meeting in San Francisco, California, November 15-19, 2003.** Africare had yet another opportunity to share her rich experience in implementing CIMCI in Ntungamo District of South Western Uganda at the above prestigious meeting. The Paper was published in the conference abstract book.

**(iii) BASICS II Project close out meeting for Ntungamo District, November 21, 2003.** Africare participated in the above meeting whose objectives were to 1) inform the district officials about the closure of the project; (2) present and discuss with the District leaders and partners the project supported activities and achievements for the last two years of implementation; and (3) discuss the mechanism through which the district and other partners will continue to support and implement activities that were started by BASICS II. Africare was mandated to build on structures left behind by BASICS II project in the new sub-counties.

**(iv) Meeting for stakeholders in preventive health, November 4, 2004.** This meeting was jointly organized by Uganda Red Cross Society-Ntungamo branch and the office of the District Director of Health Services (DDHS). The meeting had the following objectives: (1) To share experiences and challenges among stakeholders in preventive health; (2) To enhance collaboration and networking among the stakeholders; and (3) Charting the way forward. The meeting attracted people from different districts, departments, NGOs, CBOs and faith-based organizations. For Africare it was an opportune moment to build more networks for the success of CIMCI-plus project. The

meeting unanimously agreed to hold similar meetings on a quarterly basis to share information and best practices for scale up.

**(v) Village Health Team (VHT) concept meeting, November 5, 2003.** The meeting was organized and facilitated by the Ministry of Health and its objectives were: (1) to create awareness on the VHT concept; (2) to solicit and build consensus for political and administrative support for VHT implementation; (3) to build the capacity for VHT implementation; (4) to develop mechanisms for supporting and sustaining VHT activities; and (5) to develop a work plan for the VHT implementation. Africare was involved as a partner and will work closely with the VHTs after they have taken off in the implementation of CIMCI-Plus.

**(vi) Information Education Communication (IEC) materials development workshop.** Africare participated in the IEC materials development workshop that was organized by Ntungamo District Health services in collaboration with AIM. Held at Itojo Hospital, the objective of the workshop was to review the existing IEC materials on STI and HIV/AIDS interventions and adopt appropriate ones that suit the local situation. Africare will adopt some of the materials that will finally be approved for use in creating awareness on HIV/AIDS.

**(vii) Kabale HIV/AIDS youth conference.** Staff capacity building through workshops and short courses is one of the strategies under CIMCI-Plus project. On November 24-25, 2003, two Africare staff attended the second Sub-regional workshop on the President of Uganda's dialogue with young leaders on HIV/AIDS and other developments in Kabale District. The national youth desk, National youth council and Uganda AIDS Commission organized the workshop. The Chief guest was the President of the Republic of Uganda and in his speech, encouraged the youth leaders to lead exemplary lives and spread the messages of Abstinence, Be faithful and Condom use (ABC) in prevention of HIV/AIDS. Africare is promoting the ABC model in HIV/AIDS prevention and control in target communities.

**(viii) Household/C-IMCI Workshop December 16-18, 2003 Hotel Africana Kampala.** Africare staff attended and facilitated a three-day workshop organized by CORE, in collaboration with MACIS and the MOH. The purpose of the workshop was to introduce government and NGO participants to the Household/CIMCI framework and how this can assist them in planning, implementing and evaluating child survival activities using the multisectoral platform.

**(ix) Workshop for Advancing Health Outcomes through Multi-sectoral approaches.** Africare prepared and made a paper presentation during the CORE organized workshop on Reaching Communities for Child Health. The main objectives of the Workshop were to: (1) develop key characteristics of an effective multi-sectoral platform (MSP) for CIMCI; (2) identify MSP lessons learned from the existing multi-sectoral programs; (3) provide workshop opportunities for participants to share specific strategies that have been used for multi-sectoral C-MCI programming at the field sites; (4) help participants to identify new opportunities for the Multi-sectoral programming at their field sites; and (5)

identify next steps that should be taken by CORE Group to enhance the evidence base for the MSP and mobilize resources for cross-site learning.

The workshop took place at Academy for Educational Development Conference Center in Washington DC. Over eight countries Uganda inclusive participated in sharing information about their child survival projects using a Multi-sectoral approach. Research institutions that presented their research papers on application of MSP also attended the workshop. One of the conclusions drawn during the workshop was that CIMCI results can never be obtained in isolation and hence there is a need for collective efforts with local Governments, Micro Finance Institutions, Schools, NGOs, CBOs and FBOs. NGOs doing related work were advised not to compete amongst themselves but build partnerships and learn how to share resources.

**(x) Documentation Workshop.** Two Africare staff participated in case study documentation workshop that was organized by the Uganda NGO Malaria and Childhood Illness Secretariat (MACIS) facilitated and funded by CORE. The objective of the workshop was to improve the case study documentation skills for organizations doing malaria control and IMCI. The workshop was attended by different NGOs that included ADRA, AMREF, CCF, MIHV, URCS, THETA, and World Vision. Participants were introduced to different research methods, data collection and analysis techniques. This was done with the aim of improving documentation skills of project activities that will improve information sharing at different levels.

**(xi) Performance Monitoring Training.** From May 25 to 28, 2004 one Africare staff attended a performance monitoring training for USAID implementing partners. The training was organized by USAID in collaboration with Management Services International (MSI) that is implementing a five years project for Monitoring and Evaluation Management Services (MEMS) designed to provide technical assistance in performance monitoring to USAID/Uganda programs. The objective of the training was to equip different organizations implementing USAID programs and projects with skills of developing good performance monitoring plans and results frame works.

**(xii) National Fresh Air Malaria Workshop.** From June 21 to 25, 2004 Africare participated and made a paper presentation at a Fresh Air Malaria Workshop that was held at Hotel Africana in Kampala. CORE, Ministry of Health, and MACIS jointly organized the workshop. The aim of the workshop was to mobilize NGOs active participation and contributions to malaria control in Uganda in collaboration with other public and private practitioners. The Ugandan Minister of Health opened the workshop and in his remarks urged participants to improve coordination and form public-private partnerships.

**(xiii) KPC TOST training.** From August 9-20, 2004, two Africare/Ntungamo field office staff and Health Program Manager based in Washington attended the 10-day pilot test of the KPC training of survey trainers' curriculum. The training was organized by CSTS, Africare and Makerere University Institute of Statistics and applied Economics (ISAE). The training provided more knowledge to Africare staff in conducting

Knowledge Practice and Coverage (KPCs) surveys and will help to improve greatly in doing the subsequent Mid-term and Final KPC surveys.

#### **4. VISITORS TO THE PROJECT**

**(i) August 23-25, 2004, visit of the Technical Advisor, Child Survival and Health Grants Program, USAID/GH/HIDN/NUT and the Health Program manager**

**Africare/ Washington.** The two came to participate in the KPC TOST training and proceeded to Ntungamo District where they visited CIMCI-Plus project sites. During their short visit, they provided the much-needed technical guidance including a recommendation to re-analyze KPC Baseline survey data and responded to other programmatic issues.

**(ii) November 28 & 29, 2003 Africare/Uganda Country Representative and the Monetization/Admin Assistant made a field support visit to the project.** During their visit, they discussed with the program staff technical, administrative and financial issues aimed at improving performance and streamlining implementation of CIMCI-Plus and other projects.

**(iii) On October 10, 2003, the Ntungamo District Women Member of Parliament visited Africare.** During her visit, the staff briefed her about Africare projects and requested for her advocacy of Africare activities in the District and at the national level. She appreciated Africare's work and wished to have a guided visit to communities to see the impact made by different projects.

**(iv) February 7, 2004, Visitors from AED.** Africare/Ntungamo received two officials from Academy for Education Development (AED) Washington DC. The objective of their visit was to learn more about Africare/Uganda's programs especially community health activities. The visitors were briefed about different projects being implemented by Africare. They also visited the Uganda Malaria Partnership Program being implemented by Africare in Kanungu District.

**(v) March 21, 2004, Hilton Visit.** Africare/Ntungamo hosted the Project Officer for Conrad N. Hilton foundation. The objective of her visit was to assess the contribution of Africare towards improving the quality of life for people in South Western Uganda. She expressed her gratitude to Africare for a job well done on the ground as she remarked thus in one of her letters to Africare after her visit "our time in communities with local leaders and the Africare field staff was the most enjoyable aspect of the trip. Villagers shared that Africare empowers them to take ownership of the community projects and shares knowledge and skills that helps reduce food insecurity and improves their children's health".

**(vi) Resident District Commissioner's (RDC's) Visit,** Africare was honored by the visit of the new RDC to her offices. The objective of his visit was to get more insights of what the project was doing as he oversees all the NGOs activities in the District. The staff

briefed him about different projects and hoped to take him to the field to get more insights and have a feel of the activities on ground.

**(vii) May 3, 2004 Country representative's visit** The objective of his visit was to interact with staff of different projects to find out how best the country office can help to improve the performance of different projects. The CR met with different categories of staff that included management, technical and support staff and held fruitful discussions that addressed some important programmatic issues.

**(vii) Monetization/Admin Assistant and Accountant's visit.** On June 7, 2004, the Monetization/Admin Assistant and the Accountant from the Country Office visited the Project. Their objective was to provide technical backstopping in financial and administrative issues.

**(ix) June 8, 2004 Visitors from the Ministry of Health.** The aim of their visit was systems diagnosis of IMCI and to find out how C/IMCI can be institutionalized. Africare staff shared their experience, and in summary it was observed that the CIMCI approach works, what is needed is to continue systems strengthening at both the household and facility levels. In conclusion, the visitors agreed that CIMCI should be implemented using a multi-sectoral approach and when institutionalizing IMCI, a family as the basic unit should be empowered with key messages to enable it utilize available resources put into practice what is learned.

## **5. COMPLEMENTARY PROJECTS**

### **African Well Fund**

Africare received a grant from African Well Fund supported by Bono to provide clean drinking water for the children and communities in Ntungamo District. A total of seven shallow wells, and seven springs were protected with this fund in five Sub-counties of Itojo, Ngoma, Ntungamo Town Council, Rweikiniro and Rubaare.

### **USAID/Uganda**

Africare also received additional monies from the USAID mission to supplement CIMCI with nutrition activities. The monies are programmed for key activities in nutrition to HIV/AIDS, water sanitation, and education, among others. Project activities for the next year are included in the Year 2 work plan.

**The factors that have contributed to achieving the above accomplishments among others include:**

- 1) Unlike in CIMCI phase I where the project found it difficult to get started in a new district with limited infrastructure, this time most facilities like office space, telephone, electricity and other services plus committed staff with rich hands on experience were in place.

- 2) Continued technical backstopping from Africare country office and Washington headquarters has been instrumental in keeping the project on track to handle technical aspects timely and appropriately.
- 3) Support of the Ntungamo CIMCI project by the Ministry of health as a model for implementing the community component of IMCI has made it possible for the project to register all the above results in such a short period. In addition the project is building on structures and resources left behind by BASICS II and Nutrition and Early Childhood Development Project that phased out.
- 4) The project has received overwhelming support from both the District political and technical staff plus communities who actively participate in project activities. In addition the multi-sectoral/multi-project approach used by Africare makes it possible to realize outputs and impact in relatively over a short period of time thus motivating communities.
- 5) The CIMCI Phase I success stories have made it possible for new communities to easily comprehend the key messages and to translate these into action. This is being done in the form of exchange visits and using community resource persons from old communities to share their CIMCI experiences with new entrants.

## 6. ACHIEVEMENT OF PROJECT OBJECTIVES

|   | Target | On target |    | Comments  |
|---|--------|-----------|----|---|
|   |        | Yes       | No |   |
| <b>Program objective 1: To promote knowledge and behaviors related to prevention of childhood illnesses at household and community levels</b> |        |           |    |   |
| <b><u>Household</u></b>   |        |           |    |   |
| Conduct household visits  | 5,450  | X         |    | 818 household visits were made and the numbers will increase as CORPS and other structures are trained. |
| Organize household competitions   | 14     | X         |    | Activity planned for second year. Materials to use are already in place.                                |
| Conduct household KPC baseline survey   | 1      | X         |    | Was held as planned   |
| Conduct Midterm KPC survey  | 1      | X         |    | Planned for July 2006   |
| Conduct final evaluation household KPC survey   | 1      | X         |    | Planned for July 2008   |



|   | Target | On target |    | Comments   |
|---|--------|-----------|----|--|
|   |        | Yes       | No |  |
| <b><u>Community</u></b>   |        |           |    |  |
| Behavior change through<br>Community mobilization:<br>-Drama shows,                             | 500    | X         |    | 30 drama shows have been held. The field officers formed and trained community drama groups that have started disseminating child survival message.<br>16 film shows were staged. More are planned for the coming years as the first year most of the time was spent on start up activities.<br><br>640 health education sessions were held and more are hoped to be held as the project trains community own resource persons |
| -Film shows   | 250    | X         |    |  |
| -Health education sessions  | 5000   | X         |    |  |
| Organize sub-county<br>stakeholders CIMCI Plus<br>sensitization workshops                       | 7      | X         |    | All the workshops held as planned  |
| Identify community<br>structures to work with in<br>the implementation of<br>CIMCI-Plus Project | 9      | X         |    | Under the guidance of the R/M&E officer, Field officers identified all the structures to work with in the 7 sub-counties that included, 900 CORPS, 100 PDCs, 150 TBAs among others in the first quarter  |



|  |           |        |  |   |
|--|-----------|--------|--|---|
| Disseminate baseline KPC results to influence behavioral change<br>-Sub-county<br>-District level  | 350<br>70 | X<br>X |  | Baseline survey results are continuously being disseminated during all the community meetings<br>- Was completed for all the sub-counties.<br>-Results were disseminated to the District partners during the stakeholders meeting to set targets. At the District level, a meeting is planned in November to disseminate the revised results to the District technical and political leaders. |
| Modify and adapt CHIS tools  | 2         | X      |  | CORPS and PDC tools modification is on going.   |
| Support supervision and follow up visits to trained structures and staff   | 140       | X      |  | 10 support supervision visits by the technical staff to the field officers have been conducted and activity is on going. Once the structures are trained, they will also be followed up.  |
| <b>Program objective 2: Improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels</b> |           |        |  |   |

|   |        |   |  |  |
|---|--------|---|--|--|
| <b><u>Household</u></b>   |        |   |  |  |
| Educate mothers and caretakers on proper preparation of ORS, tepid sponging and appropriate feeding practices during child hood illness | 42,911 | X |  | 16,520 mothers and caretakers have been reached and the activity is on going.  |
| Operations research on factors that influence health care pattern for harmful folk “diseases” (millet & false teeth extraction)         | 1      | X |  | This activity is planned for the second year. The tool is being revised by the R/M&E officer to include the new intervention areas of Immunization and HIV/AIDS  |
| <b><u>Community</u></b>   |        |   |  |  |
| Community mobilization and awareness creation activities through  |        |   |  |  |
| - Drama shows   | 500    | X |  | 30 drama shows have been held. The field officers formed and trained at least 2 community drama groups per sub-county that have started disseminating child survival message.<br>818 households have been visited and the numbers will increase as CORPS and other structures are trained. |
| - Home visits   | 5450   | X |  | 640 health education sessions were held and more are hoped to be held as the project trains community own resource persons   |
| - Health education sessions   | 5000   | X |  |  |
| <b><u>Health facility</u></b>   |        |   |  |  |

|  |    |   |  |  |
|--|----|---|--|--|
| Conduct formative research on why health workers are not consistently following routine immunization outreach schedules      | 1  | X |  | Planned for year 2. The R/M&E officer has started on the questionnaire development for this activity.  |
| Train health workers in the use of data at the facility level to improve linkages between health units and communities       | 60 | X |  | Planned for year 2. The project is in the process of identifying a local consultant to help the project carry out training.  |
| Bi-annual health workers, PDCs and CORPs meeting at sub-county level to share experiences on home practices and care seeking | 6  | X |  | Planned for year 2 after the structures have been trained.   |
| Train project staff and health workers in LQAS methodology   | 2  | X |  | The Health Program Manager Africare/Washington, R/M&E Officer and the BCCS attended a ten days KPC TOST workshop in Kampala and one of the topics covered was using LQAS in surveys. The trained staff will train Health workers and other staff in using the same methodology |
| Modify KPC questionnaire to use at Mid-term evaluation, health facility and other assessments                                | 1  | X |  | After the KPC TOST workshop, the R/M&E officer using the knowledge obtained from the workshop and the guidance from the Health Program Manager started modification of the KPC questionnaire and will be completed in the first quarter of second year                         |

|  |        |   |  |   |
|--|--------|---|--|---|
| <b><u>District</u></b>   |        |   |  |   |
| Quarterly DHT and partners review meetings   | 14     | X |  | The project held a number of consultative meetings especially during the DIP writing and setting up project targets and revising indicators for the project. The review meetings were planned to begin in the second quarter of year 2.   |
|  |        |   |  |   |
| <b>Program objective 3: Improve accessibility of under five children and women of women of reproductive age to quality health services and products, both at the facility and community levels</b> |        |   |  |   |
| <b><u>Household</u></b>  |        |   |  |   |
| Establish backyard and front yard gardens to improve vitamin A in-take   | 4,200  | X |  | This activity will begin in the next quarter with the receipt of additional funds for the supplementary Nutrition project   |
| Promote and demonstrate the use locally improved hand washing facilities   | 400    | X |  | 140 locally improved hand washing facilities demonstrations have been carried out and more are hoped to be done in the coming years   |
| <b><u>Community</u></b>  |        |   |  |   |
| Support formation of mosquito net clubs  | 21     | X |  | 11 ITN clubs have been formed and the Project has tried to link community members to both private organizations like Safi-Net and other partner NGOs such as Uganda Red cross Society to get access to subsidized ITNS.   |
| Support to child health days   | 6      | X |  | Holding child health days is a new concept introduced by the MOH and partners to re-activate and expand the services given during immunization outreaches. The activities among others include; Vitamin A supplementation and de-worming The project supported one child health day the first one in May 2004 and plans to support more that will be held annually in May and November of every year up to year 4 |
| Promote and distribute condoms   | 50,000 | X |  | 3,648 condoms were obtained from the health facilities and were distributed in busy trading centers. The activity is on-going.  |
| Support to dipping and re-   | 4      | X |  | Dipping and re-dipping of mosquito nets was introduced by the MOH as  |

|  |                      |   |  |  |
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| dipping of mosquito nets   |                      |   |  | strategy to reduce the mosquito bites in houses during the night. The MOH plans to hold it bi-annually and Africare supported the first one that was held in June 2004 and will support more as planned.   |
| Establish links with private ITNs suppliers to access subsidized ITNS at sub-county level    | 7                    |   |  | The project has started on holding negotiations with private ITN distributors such as Safi net and the negotiation process will continue.  |
| Establish rabbit breeding centers and fish ponds to improve protein in-take                  | 5                    | X |  | The project sensitized the communities and some of them on their own started construction of the fishponds. 2 ponds have been excavated and more will be established beginning in the next quarter as part of the nutrition component of the CIMCI Plus project. |
| Construct shallow wells springs and water tanks to improve hygiene and sanitation.           | 70                   | X |  | Construction is hoped to begin as the project receives funds for the Nutrition project.  |
| Distribute ORS at community levels   | 50,000               | X |  | 80 Sackets of ORS have been distributed during demonstrations on preparations and use to mothers and the activity is ongoing.  |
| Strengthen immunization outreaches through joint planning with NDHS                          | 10                   | X |  | The project's field staffs hold meetings with Health facility staff before most outreaches are conducted. Issues that are discussed help to streamline the outreach activity. Child health days will further strengthen and improve immunization.                |
| <b>Facility</b>  |                      |   |  |  |
| Advocate for improved IMCI essential drugs supplies at health facility level                 | 10                   | X |  | This is being done through joint planning and review meetings.   |
| Support to VCT and PMCT outreaches through awareness creation by referring mothers to health | VCT=490<br>PMTCT=210 |   |  | 3 VCT outreaches were supported and the activity is ongoing<br>Only one PMTCT outreach was supported and the activity is ongoing.  |

|  |     |   |  |   |
|--|-----|---|--|---|
| facilities   |     |   |  |   |
| <b><u>District</u></b>   |     |   |  |   |
| Support national malaria days at the district level  | 3   | X |  | This activity takes place annually and support will start in the second year.   |
| Participate in the World AIDS day and national measles campaign  | 5   | X |  | The project supported the first activity in October 2003 at the start up of the second phase and will support the subsequent ones as planned.   |
|  |     |   |  |   |
| <b>Program objective 4. Strengthen national (MOH) and District capacity to replicate and sustain the community IMCI approach</b> |     |   |  |   |
| <b><u>Community</u></b>  |     |   |  |   |
| Train CORPS in CIMCI intervention areas, mobilization and communication skills   | 900 | X |  | This activity is planned for the second year of the project   |
| Orient community structures in rabbit raising, aquaculture and vegetable growing.  | 9   | X |  | An exchange visit was organized for one sub-county to learn from CIMCI old sub-counties about the establishment of rabbit breeding centers. This activity will continue with the support of funds from the Nutrition project. |
| Train and work with drama groups (2 per Sub-county) 2 at community level and 1 school based per Sub-county)                      | 21  | X |  | 14 drama groups (12 at the community level and 2 in schools) have been oriented and have started staging shows on CIMCI intervention areas. The activity is ongoing.  |
| Train parish immunization mobilizers   | 84  | X |  | Immunization mobilizers were identified and will be trained in year 2   |
| Train CCAs in mobilization and communication skills for VCT and PMTCT  | 48  | X |  | The CCAs were identified and the training activity is planned for year 2.   |



|   |       |   |  |  |
|---|-------|---|--|--|
| services  |       |   |  |  |
| Train PDCs in CIMCI intervention areas, mobilization and communication skills                 | 100   | X |  | PDCs were identified and the training is planned for year 2  |
| Training TBAs in CIMCI intervention areas, mobilization and communication skills              | 150   | X |  | Were identified and will be trained will be trained in year 2.   |
| Train water user committees members in water source maintenance and resources mobilization    | 100   | X |  | Activity planned in year 3   |
| Train of CORPS (900) and PDCs (100) in data gathering, compilation, reporting and utilization | 1,000 | X |  | Activity planned for year 2.   |
| <b><u>Health facility</u></b>   |       |   |  |  |
| Train health workers in CIMCI and interpersonal communication                                 | 60    | X |  | Activity planned for year 2  |
| <b><u>District</u></b>  |       |   |  |  |
| Update, develop and sign MOU with Ntungamo District.  | 1     | x |  | Achieved   |
| Training of trainers (TOT) for sub county trainers  | 40    |   |  | Activity not done as planned because of time constraint and is scheduled for the first quarter of the second year. |
| Build capacity of selected CBOs at sub-county level to integrate CIMCI Plus                   | 7     | X |  | Activity planned for year 4 and 5.   |

|  |    |   |  |   |
|--|----|---|--|---|
| activities in their agenda                                   |    |   |  |   |
| Organize cooking demonstrations                              | 21 | X |  | Activity planned to begin in year 3   |
| Review and adapt training materials                          | 5  | X |  | Activity completed as planned. The PDC, CORPS, sub-county trainers manual were reviewed by the BCCS in collaboration with the district and sub-county trainers. |
| Prepare activity quarterly reports                           | 15 | X |  | 4 reports were prepared as planned  |
| Prepare and compile activity annual report                   | 1  | X |  | Accomplished  |
| Local partners and staff skills assessments                  | 2  | X |  | Planned for year 2  |
| Bi-annual production of CIMCI-Plus Newsletters               | 8  | X |  | The project is finalizing the first issue as planned and the first production will come out in the first quarter of year 2.                                     |
| Headquarter support to production of project publications    | 5  | X |  | Headquarters staff participated fully during the DIP writing process and the activity is ongoing.   |
| HQ technical backstopping to the project                     | 5  | X |  | The Health Program Manager Africare Washington visited the project in August 2004 and technically helped the staff to address some of the issues.               |
| Country office technical backstopping to the project         | 10 |   |  | 6 technical backstopping visits by the country office were held with field staff and the activity is ongoing.   |
| Monthly staff planning and management meetings               | 40 | X |  | 5 meetings were held and the activity is on going   |
| Documentation of the project experiences and lessons learned |    | X |  | The activity is on-going as planned   |
| Phase over and phase out planning meetings                   |    | X |  |   |

|   |        |   |  |  |
|---|--------|---|--|--|
| <ul style="list-style-type: none"> <li>• District</li> <li>• Sub-county</li> </ul>  | 1<br>7 |   |  | Planned for year 4 and 5<br>Planned for year 4 and 5   |
| Project staff development through <ul style="list-style-type: none"> <li>• Short courses</li> <li>•</li> <li>• Workshops</li> </ul> | 2      | X |  | Planned  |
|   | 15     |   |  | Project staff have so far attended 7 workshops and more will be attended in the coming years |
| <ul style="list-style-type: none"> <li>• Meetings</li> </ul>  | 15     |   |  | 5 meetings were attended by the project staff  |
|   |        |   |  | These will be held in year 2 and 3   |
| <ul style="list-style-type: none"> <li>• Exposure visits</li> </ul>   | 2      |   |  |  |

## 7. PHASE OUT PLAN

As in CIMCI phase 1, capacity building and partnership building are major strategies for phasing out project activities in the CIMCI-plus sub-counties. As a start up activity, the project held sub-county stakeholders sensitization meetings where over 350 people that included, sub-county Chairpersons, Chiefs, LC 2 chairpersons, parish chiefs, religious and opinion leaders identified and discussed among other issues their roles and responsibilities that include participation and sustaining all the project activities. From the start, stakeholders have made commitments about sustaining the project. The project will build the capacity of 7 Community Based Organizations (CBOs) through training in intervention areas, mobilization and communication skills and will be introduced to the Sub-county leaders to support key CIMCI activities in their plans and budgets. These CBOs will be facilitated with at least five bicycles each to facilitate their movements. They will also be linked to the Health facilities to access the available supplies like ORS and condoms and to share information. The CBOs will work closely with the Sub-county Health Assistant and all the extension staff in the sub-counties.

These structures after training will be given a package of materials to help them disseminate CIMCI messages and act as role models for the promoted behaviors. 900 CORPs and 100 PDCs will be trained in data collection and use and will be given monitoring tools to support their role in documentation and information use. Training will also be conducted for 84 immunization mobilizers, 150 Traditional Birth Attendants (TBAs), 48 community counseling assistants (CCAs) 100 water user committee members, 21 drama groups and 60 health workers. All these structures will help the field Officer to carry out community mobilization and sensitization activities in the second and third year of the project and will gradually take over the roles and responsibilities of the Field officers in the fourth year of the project with minimal supervision by the field officers and will be left alone in the fifth year of the project.

In year 4 and 5, phase out meetings will be held with partners that will include the District technical and political leaders and Uganda Red cross society Ntungamo Branch and their roles and responsibilities will be outlined for the sustainability of the project. At the sub-county level, the same meetings will be held for the stakeholders to remind them of their roles that they identified during their sensitization meetings and an MOU will be signed as a sign of further commitment. The MOH embraced Africare's CIMCI phase 1 project as a model for implementing IMCI component three in the country. The project will continue documenting and sharing tools and other experiences that increase project's impact and visibility beyond the geographical limits of the project location during the phase out period. In addition, there are a number of existing synergies which will help sustain both program and health outcomes. These include strong support from the Ministry of Health for CIMCI strategies; strong partnerships with the local and national NGOs whose programming are complementary to the CIMCI project and whose capacity to continue on these programs will be built over the next four years.

### **A) Factors that have impeded progress towards achievement of overall goals and objectives**

Much as the CIMCI-Plus project has taken off very well with realization of most planned activities for the first year, there are a few limitations that require attention for smooth implementation. They include:

- (1) Lack of easy access to affordable Insecticide Treated Nets (ITNs) by the community members. Although the project has intensified messages about the use of ITNs especially among children and pregnant women there is no steady supply and prices are still too high for most rural communities.
- (2) During CIMCI Phase I, the project benefited from IEC materials obtained from partner organization such as DISH II and BASICS II. However these have since phased out and there is limited supply of such materials requiring reprinting or securing other sources.
- (3) One major lesson learnt under CIMCI phase I is that communities strongly associate with tangible supplementary activities like construction of water sources, vegetable growing and rabbit raising for practical demonstration of addressing the intervention areas. These activities were delayed until funding was secured and the procurement letter was sent to Africare. These activities are now included in the workplan and will begin in the next quarter.
- 4) PMTCT and VCT are new interventions in the district and as such the health system is not yet strong to handle the overwhelming community demand for the services.
- 5) The project has intensive community activities that require sound vehicles to carry out field activities. However the project has two very old vehicles that may not survive the life of the project. They require replacement with new ones to maintain the rhythm of the successes to date.

### **B) Actions that are being taken by the program to overcome constraints**

- 1) The CIMCI project is linking communities with NGO and private suppliers of subsidized ITNs. To date, the project has assisted communities to obtain over 250 ITNs from SAFI-Net, Population Service International (PSI), Uganda Red Cross Society and Quality Chemical LTD. It is hoped that the availability of ITNs at community level will further improve with establishing of outlets at the sub-county and introduction of government supported hundred percent subsidy of ITN to vulnerable categories, pregnant mothers and children under five years.
- 2) The project has intensified use of drama approach since it appeals more to the communities. However steps are being taken to explore possibilities of reproducing some of the key IEC materials.

3) In order to address community expectations for tangible projects to supplement CIMCI, Africare has obtained complementary funding from USAID for a nutrition project to start soon.

4) In order to address community demand for PMTCT and VCT services the District with support from MOH and other partners especially AIM, AIC, UNICEF and PSI is strengthening this sector by opening up more centers and introducing community outreaches. The CIMCI-Plus Project is supporting these efforts by co-facilitating the outreach teams and mobilizing communities.

## **8. TECHNICAL ASSISTANCE REQUIRED**

| <b>Technical assistance</b>   | <b>By whom</b>  | <b>When</b>                |
|---|---|----------------------------|
| Local partners and staff skills assessment using the Institutional Strength Assessment tool           | Africare/Washington   | 2005                       |
| Data analysis for MTE & final evaluation using LQAS methodology                                       | Local consultant  | July 2006 & July 2008      |
| Documentation of project experiences, BCC strategies, and government buy-in                           | Local consultant  | During Life of the Project |
| Project staff training in EPI-INFO and SPSS   | CSTS  | ASAP                       |
| Documentation, presentation and editing of operations and formative research findings and Newsletters | MISR, Makerere Institute of Statistics & Applied Economics (MISAE), Africare country office and Headquarters. | During Life of Project     |
| Training health workers in the use of data at the facility level                                      | MOH   | Second year activity       |
| IEC materials development and reprinting  | MOH/Local consultant  | ASAP                       |

## **9. SUBSTANTIVE CHANGES SINCE SUBMISSION OF DIP**

Africare submitted a proposal for a community based nutrition project to the Uganda USAID mission and was accepted for funding to the tune of \$300,000 to supplement the nutrition intervention of the CIMCI-Plus project. Activities under this award have been included in the workplan.

## 10. RESPONSES TO DIP REVIEW

From August 23-25, 2004, The Technical Advisor, Child Survival and Health Grants Program, USAID/GH/HIDN/NUT accompanied by Africare's Health Program Manager visited the Ntungamo CIMCI-Plus project. The purpose of the visit was to appreciate project activities and discuss with staff areas for improvement as per the DIP review process. Below are three outstanding issues from the DIP review and how the project is responding:

### Outstanding Issues

| ISSUE  | RESPONSE / COMMENT  |
|--|---|
| 1.Re-analysis of the baseline data using the mothers of children< 2 years as the sample  | The local consultant re-analyzed the data and a total of 199 children under two years were obtained on a one mother one child <2 years relationship. The targets have also been set basing on the re-analyzed data attached.  |
| 2.The breast feeding intervention and guidance on infant feeding in the context of PMTCT | <p>The Uganda MOH policy guidelines on feeding of infants and young children in the context of HIV/AIDS (September 2001) policy statement give a number of options on feeding for HIV positive mothers as listed below;</p> <p>1-HIV positive mothers who do not choose to breastfeed but are able and willing to use Commercial infant formula shall be counseled to use Commercial infant formula</p> <p>2-HIV positive mothers who do not choose to breastfeed but are willing to use animal milk shall be counseled to use Animal milk</p> <p>3-HIV positive mothers who choose to breastfeed and are able and willing to use animal milk shall be counseled to exclusively breastfeed their infants for 3 months; followed by animal milk from 3 to 6 months; followed by animal milk plus complementary foods from 6 to 24 months</p> <p>4-HIV positive mothers who choose to breastfeed but are not able or willing to use any replacement feeding shall be counseled to exclusively breastfeed their infants for 6 months; followed by complementary foods from 6 to 24 months.</p> <p>In order to avoid confusion on the part of the field officers and community members and decrease the possibility of stigmatization of HIV positive people, Africare during community information sessions will emphasize the 4<sup>th</sup> option, that of exclusive breastfeeding for 6 months. The project staff will train community counseling aides and other community resource persons on these messages. In addition, mothers will be linked to the facilities with trained health workers to be counseled and make informed decisions.</p> |
| 3.Final decision on and  | The CIMCI-plus project staff held a meeting with the  |

| ISSUE  | RESPONSE / COMMENT   |
|--|--|
| <p>description of what the project will do regarding the health facility assessment and PDQ</p>    | <p>Technical Advisor, Child Survival and Health Grants Program, USAID/GH/HIDN/NUT and the Health Program Manager, Africare/Washington and from the discussions, the field staff felt that the Health Facility Assessment might be difficult to conduct since under CIMCI-Plus there is no direct intervention addressing the health facility component per say. Thus, since the project does not have the mandate in this area, operationalizing the findings may pose some difficulties. Against this backdrop, the Health Program Manager advised that a new tool called Partnership Defined Quality (PDQ) is more applicable. The PDQ tool attempts to bridge the gaps between health facilities and communities by bringing the two together to deliberate on issues related to low utilization of the health services and jointly working out feasible strategies to fill the gaps. The approach works in the principle of mutual respect, dialogue and consensus. The project has already obtained '<i>A toolkit for community and health provider collaboration for quality improvement</i>' that it is adapting for use in our context to improve the quality and utilization of health services in target communities.</p> <p>Under the Uganda government's decentralization policy, powers and services are being brought near the grass root communities to empower them in decision-making and management of resources. In line with this policy, the MOH is implementing a number of strategies such as the Village Health Team concept, strengthening health service delivery system through opening up health Center II's to reach underprivileged populations, opening up more outreach posts and training community structures (e.g., TBAs, Immunization mobilizers, CORPS, PDCs, Drug Distributors, etc.) plus supporting NGO health clinics/projects to reach more underserved people.</p> <p>In the interest of building on the existing resources and structures, the CIMCI-Plus Project will identify the most suitable structure to link communities with health facilities. It should be noted that all activities have an element of strengthening the health worker-community relationships for improved service delivery and utilization.</p> |
| <p>4. Conduct a follow-up out-patient turn up assessment (OTA) to compare results from Phase 1</p> | <p>The project is planning to conduct a similar assessment in the new communities. This will be used as an advocacy tool as well as a monitoring tool for project interventions.</p>   |
| <p>5. Collect of the additional</p>  | <p>The project will collect the 4 rapid catch indicators, which</p>  |



| ISSUE                  | RESPONSE / COMMENT   |
|------------------------|--|
| Rapid Catch Indicators | were not collected during the baseline evaluation at midterm. These results will be compared to the final evaluation results. The decision not to collect the 1 <sup>st</sup> four indicators was made in the field and was because they were not directly related to the project interventions. The field office now understands the purpose these indicators serve for USAID and will make every effort to collect them at midterm as mentioned above. |

## 11. PROGRAM MANAGEMENT SYSTEM

Africare has got an autonomous management structure at headquarters in Washington D.C and in the field. The line of supervision is Africare/Washington Regional Director – Africare/Uganda Country Representative (CR) – Child Survival Program Coordinator (PC). During CIMCI Phase I, the project established strong organizational, administrative, financial and managerial systems that are efficient and effective for the management of CIMCI Plus. The PC supervises all field program staff, Africare/Uganda Country Office (CO) liaises with USAID/Uganda, Central MOH, national and International NGOs and agencies. The CO provides technical support and provides administrative oversight.

It must be noted that the project coordinator, Robert Mwesigwa, resigned for personal reasons shortly before writing the annual report. However, in the time before his departure, he sufficiently trained Mr. Denis Nuwagaba to serve in the capacity of Acting Program Coordinator. Denis holds a BA degree in Social Sciences with over four years of professional experience in training and BCC in the area of CIMCI and three years of conducting related community development work. He has been instrumental in the success of CIMCI phase I and is using his experience to reach the goals and objectives of CIMCI-Plus. Denis is currently functioning in two roles: Acting Project Coordinator and BCC Specialist. The Project Coordinator reports to the Country Representative based in Kampala. Africare/Washington will soon name a permanent Project Coordinator to serve in full capacity.

The position of a Research/Monitoring and Evaluation Officer is a Ugandan professional with a BA degree in economics, statistical science with over four years M&E experience and formerly a field officer under CIMCI phase one. The officer supports the PC in developing the project's M&E system and coordinating formative/ operational research activities. In collaboration with Ministry of Health, She determines data collection methods, tools and checklists, facilitate data collection and compilation of Reports. The RM&E reports to the PC.

Administrative/Accounts Assistant is held by a Ugandan with an accounting degree and over five years of working experience. He is responsible for the financial administrative and logistical aspects. He reports to the PC.

The project has employed 7 field officers who are Ugandan professionals with a university degree. They are based in the communities they serve, one field Officer per sub-county. At the end of the fourth year, activities will gradually be handed over to health and community structures. The Field Officers report to the BCCS/Ag, PC.

The Country Representative is an expatriate with over ten years in community development career. He oversees the management of CIMCI-Plus and provides support to project organizational development activities. He maintains dialogue with MOH, national and international NGOS and agencies and will ensure that the project fits within GOU policy framework. He meets regularly with project staff and will visit program area at least on a quarterly basis.

The Health Program Manager based at Africare/Washington Headquarters is an experienced public health practitioner. S/he makes regular trips to the project to assist with project mobilization, assessment, DIP development, and implementation of mid term and final evaluations. S/he facilitates exchange of experience and lessons learned and give technical assistance in partners' assessment, operational and formative research studies, M&E and program documentation. S/he will review project plans and reports. Other members of the health unit will provide additional technical support as needed. The health Programs Manager reports to the Director of Health Program.

At Africare/Washington Headquarters, the Regional Director East/West Anglophone Countries provides overall leadership and guidance to the project. The director of health Programs provides technical oversight and maintains coordination with GH/HIDN and will identify opportunities for cross-fertilization between health programs in different regions. The HIV/AIDS Unit is already providing Technical Assistance related to the HIV/AIDS intervention. East Region Program Manager and Secretary provide coordinating and logistical support. At the country office, the Administrator and Accountant provide effective administrative, procurement, personnel and financial systems and ensure that Africare procedures are appropriately implemented.

At the District level, the main Partner for CIMCI-Plus is Ntungamo District Heath Team (DHT), The Director of District Health Services (DDHS) chairs the DHT. The team has already played a critical role CIMCI-Plus project start-up activities such baseline survey DIP writing, working closely with project staff to sensitize communities and will continue the coordination, supervision and monitoring of project activities through joint quarterly partners review meetings and field visits. As outlined in the work plan, all segments of the community and health system will actively participate in program implementation, ownership and sustainability.

**12. CIMCI-PLUS WORKPLAN FOR THE SECOND YEAR: OCTOBER 1, 2004-  
SEPTEMBER, 30, 2005**

| Major activities   | Target             | Activity focus | Time frame |    |    |    | Personnel responsible |
|--|--------------------|----------------|------------|----|----|----|-----------------------|
|  |                    |                | Year 2     |    |    |    |                       |
|  |                    |                | Q 1        | Q2 | Q3 | Q4 |                       |
| <b>Objective 1: Promote knowledge and behaviors related to prevention of childhood illnesses at the household and community levels</b>                       |                    |                |            |    |    |    |                       |
| <b><u>Household</u></b>  |                    |                |            |    |    |    |                       |
| Conduct household visits   | 1362               | BC             | x          | x  | x  | x  | 1,2,3                 |
| Organize household competitions  | 4                  | BC             | x          | x  | x  | x  | 1, 2, 4               |
| <b><u>Community</u></b>  |                    |                |            |    |    |    |                       |
| Community mobilization through<br>- Drama shows,<br>- Film shows<br>- Health educations  | 117<br>58<br>1,090 | BC             | x          | x  | x  | x  | 2, 4, 10 12           |
| Disseminate baseline KPC results to influence behavioral change<br>- District level  | 70                 | BC             | x          | x  | x  | x  | 4, 10                 |
| Modify and adapt CHIS tools  | 2                  | Q, BC          | x          |    |    |    | 4, 10                 |
| Support supervision and follow up visits to trained structures and staff   | 33                 | Q, BC          | x          | x  | x  | x  | 4, 10                 |
| <b>Program objective 2: Improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels</b> |                    |                |            |    |    |    |                       |

| Major activities   | Target                       | Activity focus | Time frame |   |   |   | Personnel responsible |
|--|------------------------------|----------------|------------|---|---|---|-----------------------|
| <b><u>Household</u></b>  |                              |                |            |   |   |   |                       |
| Educate mothers and caretakers on proper preparation of ORS, tepid sponging and appropriate feeding practices during child hood illness  | 8,582                        | BC             | x          | x | x | x | 1,2,3,4,10,12,21      |
| Operations research on factors that influence health care pattern for harmful folk “diseases” (millet & false teeth extraction)  | 1                            | BC             |            |   | x |   | 4,10,11               |
| <b><u>Community</u></b>  |                              |                |            |   |   |   |                       |
| Community mobilization and awareness creation activities through <ul style="list-style-type: none"> <li>- Drama shows</li> <li>- Home visits</li> <li>- Health education sessions</li> </ul> | 117<br><b>1,362</b><br>1,090 | BC             | x          | x | x | x | 4,10,12, 14           |
| <b><u>Health facility</u></b>  |                              |                |            |   |   |   |                       |
| Conduct formative research on why health workers are not consistently following routine immunization outreach schedules  |                              | BC             |            | x |   |   | 4,10,11               |

| Major activities   | Target | Activity focus | Time frame |   |   |   | Personnel responsible |
|--|--------|----------------|------------|---|---|---|-----------------------|
| Train health workers in the use of data at the facility level to improve linkages between health units and communities   | 60     | Q, BC          |            |   | x | x | 10,11                 |
| Bi-annual health workers, PDCs and CORPs meeting at sub-county level to share experiences on home practices and care seeking   | 6      | Q, A           |            |   | x |   | 2,3,10,22             |
| Modify KPC questionnaire to use at Mid-term evaluation, health facility and other assessments  | 1      | Q, BC          | x          |   |   |   | 10, 11,               |
| <b>District</b>  |        |                |            |   |   |   |                       |
| Quarterly DHT and partners review meetings   | 4      |                |            | x | x | x | 9, 8, 10              |
| <b>Program objective 3: Improve accessibility of under five children and women of women of reproductive age to quality health services and products, both at the facility and community levels</b> |        |                |            |   |   |   |                       |
| <b>Household</b>   |        |                |            |   |   |   |                       |
| Establish backyard and front yard gardens to improve vitamin A in-take   | 4,200  | A              |            |   |   |   |                       |
| Promote and demonstrate the use of locally improved hand washing facilities  | 80     | A, BC          | x          | x | x | x | 2,9,13                |
| <b>Community</b>   |        |                |            |   |   |   |                       |
| Support formation of mosquito net  | 6      | A, BC          | x          | x | x | x | 2, 9, 14              |

| Major activities  | Target              | Activity focus | Time frame |   |   |   | Personnel responsible |
|---|---------------------|----------------|------------|---|---|---|-----------------------|
| clubs   |                     |                |            |   |   |   |                       |
| Support to child health days  | 2                   | A, BC          | x          |   | x |   | 9                     |
| Promote and distribute condoms  | 10,000              | A, BC          | x          | x | x | x | 2,3,9                 |
| Support to dipping and re-dipping of mosquito nets  | 2                   |                | x          |   | x |   | 3,9                   |
| Establish links with private ITNs suppliers to access subsidized ITNS at sub-county level | 4                   | A              | x          | x | x | x | 9                     |
| Establish rabbit breeding centers and fish ponds to improve protein in-take               | 5                   | A, BC          | x          | x | x | x | 9, 15                 |
| Construct shallow wells springs and water tanks to improve hygiene and sanitation.        | 70                  | A              | ?          | ? | ? | ? | 3,9, 23               |
| Strengthen immunization outreaches through joint planning with NDHS                       | 10                  | A              | x          | x | x | x | 2,3,9                 |
| Distribute ORS at community levels  | 10,000              | A              | x          | x | x | x | 2,3,9                 |
| Advocate for improved IMCI essential drugs supplies at health facility level              | 3                   | A              | x          | x | x | x | 9, 4, 3               |
| Support to VCT and PMCT outreaches through awareness creation by referring mothers        | VCT=122<br>PMTCT=52 | A              | x          | x | x | x | 9, 3, 4, 20           |

| Major activities   | Target | Activity focus | Time frame |   |   |   | Personnel responsible |
|--|--------|----------------|------------|---|---|---|-----------------------|
| to health facilities   |        |                |            |   |   |   |                       |
| <b><u>District</u></b>   |        |                |            |   |   |   |                       |
| Support national malaria days at the district level  | 1      | BC             |            | x |   |   | 9,4, 3                |
| Participate in the World AIDS day and national measles campaign  | 1      | BC             | x          |   |   |   | 9,4, 3                |
| <b>Program objective 4. Strengthen national (MOH) and District capacity to replicate and sustain the community IMCI approach</b> |        |                |            |   |   |   |                       |
| <b><u>Community</u></b>  |        |                |            |   |   |   |                       |
| Train CORPS in CIMCI intervention areas, mobilization and communication skills   | 500    | Q, BC          | x          | x | x | x | 4, 9, 3               |
| Orient community structures in Rabbit raising, aquaculture and vegetable growing.  | 9      | Q, BC          | x          | x | x | x | 9,13,15,16            |
| Train and work with drama groups (2 per Sub-county) 2 at community level and 1 school based per Sub-county)                      | 7      | BC             | x          | x | x | x | 10, 12, 14            |
| Train parish immunization mobilizers   | 84     | Q, BC          |            | x | x | x | 4,9                   |
| Train CCAs in mobilization and communication skills for VCT and PMTCT services   | 48     | Q, BC          |            |   |   | x | 4, 9, 17, 18          |
| Train PDCs in CIMCI intervention areas, mobilization and   | 100    | Q, BC          |            | x | x | x | 4, 9                  |

| Major activities  | Target | Activity focus | Time frame |   |   |   | Personnel responsible |
|---|--------|----------------|------------|---|---|---|-----------------------|
| communication skills  |        |                |            |   |   |   |                       |
| Training TBAs in CIMCI intervention areas, mobilization and communication skills              | 150    | Q, BC          |            |   |   | x | 4, 9, 26, 10          |
| Train water user committees members in water source maintenance and resources mobilization    | 100    | Q, BC          |            |   |   |   | 9, 19, 23             |
| Train of CORPS (900) and PDCs (100) in data gathering, compilation, reporting and utilization | 1,000  | Q, BC          | x          | x | x | x | 9, 4, 10, 26          |
| <b><u>Health facility</u></b>   |        |                |            |   |   |   |                       |
| Train health workers in CIMCI and interpersonal communication                                 | 60     | Q              |            | x | x |   | 4, 9                  |
| <b><u>District</u></b>  |        |                |            |   |   |   |                       |
| Training of trainers (TOT) for sub county trainers  | 40     | Q              | x          |   |   |   | 9, 4, 10              |
| Prepare activity quarterly reports  | 15     | Q              | x          | x | x | x | 9                     |
| Prepare and compile activity annual report  | 1      | Q              |            |   |   | x | 9, 5, 10, 6           |
| Local partners and staff skills assessments   | 2      | Q              |            | x | x | x | 5,9, 6                |
| Bi-annual production of CIMCI-Plus News letters   | 8      | BC             |            | x |   |   | 9, 6                  |



| Major activities  | Target | Activity focus | Time frame |   |   |   | Personnel responsible |
|---|--------|----------------|------------|---|---|---|-----------------------|
| Headquarter support to production of project publications   | 5      | BC, Q          |            |   |   | x | 5                     |
| HQ technical backstopping to the project  | 1      | Q              | x          | x | x | x | 5, 6                  |
| Country office technical backstopping to the project  | 5      | Q              | x          | x | x | x |                       |
| Monthly staff planning and management meetings  | 12     | Q              | x          | x | x | x | 9                     |
| Documentation of the project experiences and lessons learned  |        | BC, Q          | x          | x | x | x | 9, 6                  |
| Project staff development through <ul style="list-style-type: none"> <li>❖ Short courses</li> <li>❖ Workshops</li> <li>❖ Meetings</li> <li>❖ Exposure visits</li> </ul> |        | Q, BC          | x          | x | x | x | 9, 20, 21, 25         |

**Key for Abbreviations:**

**BC** = Behavior Change; **Q** = Quality; **A** = Access; Field Officer = **1**; CORPS = **2**, Health Workers = **3**; NDHS = Ntungamo District Health Services = **4**; Africare Headquarters = **5**; Country Office = **6**; Statistician = **7**; External Consultant = **8**; Africare Field Office = **9**; Africare Field Office Staff = **10**; Makerere University = **11**; Drama Group = **12**; Agricultural Extension Officers = **13**; Women Groups = **14**; Vet Officers = **15**; Fisheries Extension Officers = **16**; The Aids Support Organization = **17**; AICM = **18**; District Health Inspectors = **19**; Ministry of Health = **20**; Implementing Partners = **21**; Parish Development Committee = **22**; District Water Eng. = **23**; Ntungamo District Local Government = **24**; Malaria and Childhood Illness NGO Secretariat = **25**; Sub-county Trainers = **26**

## **HIGHLIGHTS PAGE: Africare Community Drama for Child Survival: A success Story from Ntungamo District -Uganda.**

Uganda has low levels of literacy especially among women who bear the primary responsibility of raising children, 57% for women as compared to 69 % for men. With very high poverty levels in most rural communities, the majority of families do not have access to mass media. However, in most African culture the drum represents a great musical instrument around which communities, schools and churches come together to sing, praise and learn. Africare, through CIMCI Plus, has utilized this strong unifying symbol to help disseminate substantial health information to communities. ***“For many of us who didn’t go to school, Africare through this educative drama has brought a classroom we better understand right here in our village to improve our health and that of our children”*** stated a 56 year old community leader after a drama show in Bwongyera sub-county, Ntungamo District.

In Ntungamo District, community drama for child survival refers to the composition of songs, poems, plays and performance by community or school based troupes aimed at influencing mothers and caretakers to practice essential prevention and care seeking behaviors related to childhood illnesses. Under the guidance of Behavior Change Communication Specialist, the Africare field staff has worked closely with Extension Workers to identify, train and mentor community and school-based groups on basic artistic skills which will be used to present key messages in an informative, educative and entertaining way. The drama presentations are informed by surveys administered at the community level on positive and negative practices linked to project intervention areas (malaria, diarrhea, nutrition, HIV/AIDS, immunization) and general child and maternal health. Through drama and based on the findings of the assessment, the project develops and formulates plays, songs, and poems to deliver key child survival messages as well as discourage dangerous cultural beliefs and practices such tooth extraction. While participation in the drama groups is voluntary, the project offers small incentives including lunch provision, transportation and, when budget allows, free T-shirts with messages, banners and costumes. Groups are trained and rehearse the messages over a period of 4 weeks after which time they present their work to the community. Mobilization involves all community leaders including those from the church and health units. On the day of the event, a health worker from a nearby health facility provides additional information and responds to queries raised by the community.

While building on the successes of CIMCI Phase one, drama continues to be the most popular information dissemination approach in the Africare-Ntungamo child survival project. Within the first year of implementation, at least 14 groups have been trained and over 30 drama shows have been staged in the seven targeted sub-counties reaching over 10,500 people. As a result of this mass awareness, the number of mothers and caretakers seeking timely and appropriate health care is steadily improving. During the national measles campaign in October 2003, Ntungamo emerged among the best performing district in Uganda with an impressive stride from 78% to 109% coverage. The drama approach has been instrumental in formation of Self-Help ITN Clubs where members pool meager resources to buy ITNs. At least 11 groups have been formed and over 250 ITNs purchased and distributed. Another successful impact of drama shows is the promotion of vitamin A-rich foods and locally adapted hand-washing facilities. In addition, built on the Positive Deviance/Hearth Model, the CIMCI Model Households program enables homes that are practicing the key messages to become learning sites for the community. There are approximately 245 CIMCI-model homes and the number is steadily increasing.

In conclusion, while applying the community drama for child survival approach, Africare has learned that behavior change approaches should be locally relevant and adapted to the culture. The use of community drama merges entertainment and educative tools, which reach a wide section of the community irrespective of age, gender, or literacy. Finally, the community drama intervention has a

lasting impact on drama group members who grow to be “role models” in their respective communities.

## **Annex 1: CSHGP DATA FORM**

### ***FIELD CONTACT INFORMATION:***

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**Last Name:** Ngosi  
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**City:** Kampala  
**State/Province:**  
**Zip/Postal Code:**  
**Country** Uganda  
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**Project Web Site:** [www.africare.org](http://www.africare.org)

### ***PROJECT INFORMATION:***

|                            |   |
|----------------------------|---|
| <b>Project Description</b> | Ntungamo's needs are great and growing. High infant and child mortality of 98 and 176/1,000 live births respectively characterize child health in the proposed extension area. This is attributed to high prevalence of malaria, diarrhea, malnutrition, and to a lesser degree, pneumonia. Immunization rates have recently fallen dramatically with only 38% of children 12-23 months fully vaccinated and only 18% of pregnant women covered for Tetanus Toxoid. HIV/AIDS prevalence is estimated higher than the national figure of 6.1%, and maternal mortality is estimated at 505/100,000 live births. The CIMCI-Plus Project extends Africare's child survival work from the 8 sub-counties already served in the first phase, to the other 7 sub-counties of the district. |
|----------------------------|---|

|                             |  |
|-----------------------------|--|
| <b>Project Description:</b> | CIMCI-Plus will reach 82,091 new beneficiaries comprised of 39,180 children under five and 42,911 women of reproductive age. In addition, it |
|-----------------------------|--|

|                          |  |
|--------------------------|--|
|                          | <p>will indirectly benefit an estimated 104,476. CIMCI-Plus will spread the impact of the CIMCI methodology far beyond Ntungamo. CIMCI-Plus will provide experience-based inputs to help build the support network and to document and disseminate lessons learned, so that CIMCI is truly embedded in Uganda's national health care programs and policies. With its partner, Ntungamo District Health Services, Africare seeks to further impact child health in the Ntungamo and beyond. The goal of CIMCI-Plus is to reduce morbidity and mortality of children under five and improve the health status of women of reproductive age in the Ntungamo district, by the end of 2008. To reach this goal, CIMCI-Plus has 4 general objectives: 1. To promote knowledge and behavior related to the prevention of childhood illnesses, at household and community levels; 2. To improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels; 3. To improve accessibility of under-five children and women of reproductive age to quality health services and products, both at facility and community levels; and 4. To strengthen national and district MOH capacity to replicate and sustain the community IMCI approach.</p> |
| <b>Partners:</b>         | <p>Ntungamo District Health services is the key implementing partner. Others include: MOH for policy frame work and advocacy; WHO and UNICEF for technical guidance; URCS co-implementer, AIM program, AIC and TASO co-implementers and provide technical support in the HIV/AIDS intervention areas; UFSI II, ADRA and Kyera farm project for provision of technical assistance in the Nutrition intervention; UWESO for identification and training of orphan care givers; Makerere University for data management and documentation; CBOs for sustaining CIMCI activities in the Sub-county; and MACIS will be a fora for dissemination of CIMCI-Plus project's experiences and lessons.</p>  |
| <b>Project Location:</b> | <p>Ntungamo District is located in South Western Uganda bordering Kabale and Rukungiri Districts in the West, Bushenyi in the North, Mbarara in the East and Republic of Rwanda in the South (see map in attachment.) The District was created in 1993 by administrative re-organization of two districts of Bushenyi and Mbarara. Being newly created, it lacks the infrastructure of well-established districts. In 2001 the sub-county of Itojo, previously part of Mbarara, was added to Ntungamo. With a total area of 1,930 square kilometers, Ntungamo is composed of three counties of Kajara, Rushenyi and Ruhaama. These are sub-divided into 15 sub-counties consisting of 86 parishes and 879 villages. The population of Ntungamo is 386,816 of whom 99% are rural according to the 2002 population and housing census.</p>   |

#### ***GRANT FUNDING INFORMATION:***

|                              |             |                          |           |
|------------------------------|-------------|--------------------------|-----------|
| <b>USAID Funding:(US \$)</b> | \$1,299,999 | <b>PVO match:(US \$)</b> | \$383,880 |
|------------------------------|-------------|--------------------------|-----------|

***TARGET BENEFICIARIES:***

| <b>Type</b>                      | <b>Number</b> |
|----------------------------------|---------------|
| <b>Infants (0-11 months):</b>    | 12,028        |
| <b>12-23 month old children:</b> | 12,028        |
| <b>24-59 month old children:</b> | 15,124        |
| <b>0-59 month old children:</b>  | 39,180        |
| <b>Women 15-49:</b>              | 42,911        |

***BENEFICIARY RESIDENCE:***

| <b>Urban/Peri-Urban %</b> | <b>Rural %</b> |
|---------------------------|----------------|
| 1%                        | 99%            |

***GENERAL STRATEGIES PLANNED:***

Private Sector Involvement  
Strengthen Decentralized Health System  
Information System Technologies  
Information System Technologies

***M&E ASSESSMENT STRATEGIES:***

KPC Survey  
Organizational Capacity Assessment with Local Partners  
Organizational Capacity Assessment for our own PVO  
Participatory Rapid Appraisal  
Participatory Learning in Action  
Lot Quality Assurance Sampling  
Community-based Monitoring Techniques  
Participatory Evaluation Techniques (for mid-term or final evaluation) KPC Survey

***BEHAVIOR CHANGE & COMMUNICATION (BCC) STRATEGIES:***

Interpersonal Communication  
Peer Communication  
Support Groups  
Positive deviant approach  
Behave framework

***CAPACITY BUILDING TARGETS PLANNED:***

| <b>PVO</b>  | <b>Non-Govt Partners</b> | <b>Other Private Sector</b>   | <b>Govt</b>  | <b>Community</b>   |
|---|--------------------------|---|--|--|
| <ul style="list-style-type: none"> <li>• US HQ (CS unit)</li> <li>• CS Project Team US</li> <li>• HQ (CS unit)</li> <li>• CS Project Team US,</li> <li>• HQ (CS unit)</li> <li>• CS Project Team</li> </ul> | (None Selected)          | <ul style="list-style-type: none"> <li>• Private Providers</li> </ul> | <ul style="list-style-type: none"> <li>• Dist. Health System</li> <li>• Health Facility Staff</li> </ul> | <ul style="list-style-type: none"> <li>• Health CBOs</li> <li>• Other CBOs</li> <li>• CHWs Health</li> <li>• CBOs</li> </ul> |

***INTERVENTIONS:***

**Immunizations 25 %**

\*\* IMCI Integration

\*\* CHW Training

\*\* HF Training

\*\*\* Classic 6 Vaccines

\*\*\* Vitamin A

\*\*\* New Vaccines

**Control of Diarrheal Diseases 10 %**

\*\* IMCI Integration

\*\* CHW Training

\*\* HF Training

\*\*\* Water/Sanitation

\*\*\* Hand Washing

\*\*\* ORS/Home Fluids

\*\*\* Feeding/Breastfeeding

\*\*\* Care Seeking

**Malaria 35 %**

\*\* CHW Training

\*\* HF Training

\*\*\* Care Seeking, Recog., Compliance

**HIV/AIDS 15 %**

\*\* CHW Training

\*\* HF Training

\*\*\* Behavior Change Strategy

|   |
|---|
| *** Access/Use of Condoms                                 |
| <b>Nutrition/Micronutrients/Vitamin A (Combined) 15 %</b> |
| ** IMCI Integration                                       |
| ** CHW Training   |
| ** HF Training  |
| *** Gardens   |
| *** Comp. Feed. from 6 mos.                               |
| *** Hearth  |
| *** Cont. BF up to 24 mos.                                |
| *** Iron Folate in Pregnancy                              |



| <b>Indicator<sup>1</sup></b>   | <b>Numerator</b> | <b>Denominator</b> | <b>Estimated Percentage</b> | <b>Confidence line</b> |
|--|------------------|--------------------|-----------------------------|------------------------|
| 1. Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population) | 0                | 0                  | 0.0                         | 0.0                    |
| 2. Percentage of children age 0-23 months who were born at least 24 months after the previous surviving child  | 0                | 0                  | 0.0                         | 0.0                    |
| 3. Percentage of children age 0-23 months whose births were attended by skilled health personnel   | 0                | 0                  | 0.0                         | 0.0                    |
| 4. Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child    | 57               | 199                | 28.6%                       | 21.9%-34.3%            |
| 5. Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours  | 46               | 60                 | 76.7%                       | 66.0%-87.4%            |
| 6. Percentage of infants age 6-9 months receiving breast milk and complementary foods  | 30               | 34                 | 88.2%                       | 77.4%-99.0%            |
| 7. Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday        | 50               | 96                 | 52.1%                       | 41.6%-62.4%            |
| 8. Percentage of children age 12-23 months who received a measles vaccine  | 53               | 139                | 38.1%                       | 30.0%-46.7%            |
| 9. Percentage of children age 0-23 months who slept under an insecticide-treated bed net the previous night (in malaria-risk areas only)             | 28               | 199                | 14.1%                       | 9.3%-18.9%             |
| 10. Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment                                      | 156              | 199                | 78.4%                       | 72.7%-84.1%            |
| 11. Percentage of sick children age 0-23 months who received increased   | 72               | 99                 | 72.7%                       | 62.9%-81.2%            |

<sup>1</sup> Baseline data was not collected for indicators 1, 2, and 3 because they are not part of the CIMCI Project's intervention areas.

| <b>Indicator<sup>1</sup></b>  | <b>Numerator</b> | <b>Denominator</b> | <b>Estimated Percentage</b> | <b>Confidence line</b> |
|---|------------------|--------------------|-----------------------------|------------------------|
| fluids and continued feeding during an illness in the past two weeks  |                  |                    |                             |                        |
| 12. Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection  | 137              | 199                | 68.8%                       | 62.4%-75.2%            |
| 13. Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated | 7                | 199                | 6.2%                        | 2.8%-9.6%              |

**ANNEX 2: REVISED DETAILED IMPLEMENTATION PLAN**

**Community-based Integrated Management of Childhood Illness (CIMCI)  
Plus Project in**

**Ntungamo District, Uganda**

**October 1, 2003 to September 30, 2008**

**Cooperative Agreement # FAO-A-00-99-00025-00 Modification No.02**

**Submitted by:**

**Africare Inc.  
440 R Street, NW  
Washington, DC 20001**

**In collaboration with**

**Ntungamo District Health Services and Uganda National IMCI Program**

**To:**

**United States Agency for International Development  
Bureau for Global Health  
Office of Health, Infectious Disease, and Nutrition  
Washington, D.C.**

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Alan Alemian, Regional Director, East/West Anglophone,  
Africare/Washington**

**OCTOBER 29, 2004**

## ACRONYMS

|                  |   |
|------------------|---|
| <b>ABC</b>       | Abstain Be-faithful and use Condoms   |
| <b>ACDI-VOCA</b> | Agricultural Cooperative Development International and<br>Volunteers in Overseas Cooperative Assistance |
| <b>ADRA</b>      | Adventist Development Relief Agency   |
| <b>AEFI</b>      | Adverse Effects Following Immunization  |
| <b>AICM</b>      | African International Christian Ministry  |
| <b>AIDS</b>      | Acquired Immune Deficiency Syndrome   |
| <b>AIM</b>       | AIDS Integrated Model Project   |
| <b>ARI</b>       | Acute Respiratory Infections  |
| <b>BASICS</b>    | Basic Support for Institutionalizing Child Survival   |
| <b>BCC</b>       | Behavior Change Communication   |
| <b>CATCH</b>     | Core Assessment Tool on Child Health  |
| <b>CBO</b>       | Community-based Organization  |
| <b>CCA</b>       | Community Counseling Aides  |
| <b>CCW</b>       | Child Care Workers  |
| <b>CDD</b>       | Control of Diarrhea Diseases  |
| <b>CHIS</b>      | Community Health Information System   |
| <b>CIMCI</b>     | Community-based Integrated Management of Childhood Illnesses  |
| <b>CMS</b>       | Commercial Marketing Strategies   |
| <b>CORE</b>      | Child Survival Collaborations and Resources Group   |
| <b>CORP</b>      | Community Owned Resource Persons  |
| <b>CSTS</b>      | Child Survival Technical Support Project  |
| <b>DDHS</b>      | Director of District Health Services  |
| <b>DENIVA</b>    | Development Network for Indigenous and Voluntary Associations   |
| <b>DHT</b>       | District Health Team  |
| <b>DIP</b>       | Detailed Implementation Plan  |
| <b>DISH</b>      | Delivery of Improved Services for Health  |
| <b>EDF</b>       | European Development Fund   |
| <b>EPI</b>       | Expanded Program on Immunization  |
| <b>FBOs</b>      | Faith Based Organizations   |
| <b>FM</b>        | Frequency Mode  |
| <b>GOU</b>       | Government of Uganda  |
| <b>HA</b>        | Health Assistants   |
| <b>HBMF</b>      | Home-Based Management of Fever  |
| <b>HC</b>        | Health Center   |
| <b>HIDN</b>      | Health Infectious Disease and Nutrition   |
| <b>HIV</b>       | Human Immune Deficiency Virus   |
| <b>HMIS</b>      | Health Management Information System  |
| <b>HSD</b>       | Health Sub-district   |
| <b>HUMC</b>      | Health Unit Management Committee  |
| <b>IDA</b>       | Iodine Deficiency Anemia  |
| <b>IEC</b>       | Information Education and Communication   |
| <b>IMCI</b>      | Integrated Management of Childhood Illnesses  |
| <b>IRS</b>       | Indoor Residual Spraying  |
| <b>ISA</b>       | Institutional Strengths Assessment  |
| <b>ITN</b>       | Insecticide Treated Nets  |

|               |   |
|---------------|---|
| <b>KPC</b>    | Knowledge Practices and Coverage Survey             |
| <b>LC</b>     | Local Council                                       |
| <b>LQAS</b>   | Lot Quality Assurance Sampling                      |
| <b>MACIS</b>  | Malaria and Childhood Illness Secretariat           |
| <b>MCP</b>    | Malaria Control Program                             |
| <b>MISR</b>   | Makerere Institute of Social Research               |
| <b>MO</b>     | Medical Officer                                     |
| <b>MoH</b>    | Ministry of Health                                  |
| <b>MTCT</b>   | Mother to Child Transmissions                       |
| <b>MTE</b>    | Mid Term Evaluation                                 |
| <b>NDHS</b>   | Ntungamo District Health Services                   |
| <b>NECDP</b>  | Nutrition and Early Childhood Development Project   |
| <b>NEMA</b>   | National Environment Management Authority           |
| <b>NGO</b>    | Non Governmental Organization                       |
| <b>NMCP</b>   | National Malaria Control Program                    |
| <b>NRC</b>    | Ntungamo Red Cross                                  |
| <b>NRM</b>    | Natural Resource Management                         |
| <b>OR</b>     | Operations Research                                 |
| <b>ORS</b>    | Oral Re-hydration Salts                             |
| <b>OTA</b>    | Out-patient Turn Up Assessment                      |
| <b>PAF</b>    | Poverty Alleviation Fund                            |
| <b>PCM</b>    | Pneumonia Case Management                           |
| <b>PDC</b>    | Parish Development Committee                        |
| <b>PLHA</b>   | People Living with HIV/AIDS                         |
| <b>PLWA</b>   | People Living With AIDS                             |
| <b>PME</b>    | Program Monitoring and Evaluation                   |
| <b>PP</b>     | Private Practitioner                                |
| <b>PPPH</b>   | Public Private Partnership for Health               |
| <b>PRA</b>    | Participatory Rural Appraisal                       |
| <b>PSI</b>    | Population Services International                   |
| <b>PTC</b>    | Post Test Club                                      |
| <b>PVO</b>    | Private Voluntary Organization                      |
| <b>RBM</b>    | Roll Back Malaria                                   |
| <b>SARA</b>   | Support for Analysis and Research in Africa Project |
| <b>SC</b>     | Sub-county  |
| <b>STI</b>    | Sexually Transmitted Infections                     |
| <b>SWOT</b>   | Strengths Weaknesses Opportunities and Threats      |
| <b>TBAs</b>   | Traditional Birth Attendants                        |
| <b>TH</b>     | Traditional Healer                                  |
| <b>TOT</b>    | Training of Trainers                                |
| <b>TT</b>     | Tetanus Toxoid                                      |
| <b>UDHS</b>   | Uganda Demographic and Health Survey                |
| <b>UFSI</b>   | Uganda Food Security Initiative                     |
| <b>UNEPI</b>  | Uganda National Expanded Program on Immunization    |
| <b>UNICEF</b> | United Nations Children's Fund                      |
| <b>URCS</b>   | Uganda Red Cross Society                            |
| <b>USAID</b>  | United States Agency for International Development  |
| <b>US</b>     | United States                                       |

**VCT**  
**WHO**

Voluntary Counseling and Testing  
World Health Organization

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## **REVISED ANNEXES**

**Annex 1: Revised CSHGP Data Form**

**Annex 2: Revised KPC Report**

## A. EXECUTIVE SUMMARY

In the Cost Extension category, Africare was awarded a grant of \$1,299,999 from USAID/GH/HIDN's Child Survival and Health Grants Program (CSHGP) to support a 5-year extension of its **Community Based Integrated Management of Childhood Illness (CIMCI) Project in Ntungamo District of South Western Uganda**. The project will run from October 1, 2003 through September 30, 2008.

Phase I of the CIMCI project was instrumental in supporting the first steps of Uganda's central Ministry of Health (MOH) in the development of national CIMCI strategies and its subsequent scale up in the entire country. CIMCI-Plus will provide experience-based inputs to help build a national support network for CIMCI and to document and disseminate lessons learned to further build national capacity for its implementation.

Ntungamo's needs are great and growing. High infant and child mortality of 98 and 176/1,000 live births respectively characterize child health in the proposed extension area. This is attributed to high prevalence of malaria, diarrhea, malnutrition, and to a lesser degree, pneumonia. Immunization rates have recently fallen dramatically with only 38% of children 12-23 months fully vaccinated and only 18% of pregnant women covered for Tetanus Toxoid. HIV/AIDS prevalence is estimated to be higher than the national figure of 8.3%, and maternal mortality is estimated at 505/100,000 live births.

CIMCI-Plus will extend Africare's child survival work from the 8 sub-counties already served in the first phase, to the other 7 sub-counties of **Nyakyera, Ruhaama, Bwongyera, Ihunga, Kayonza, Rugarama and Itojo**.

CIMCI-Plus will reach 82,091 beneficiaries comprised of 39,180 children under five and 42,911 women of reproductive age. In addition, it will indirectly benefit an estimated 104,476 people. CIMCI-Plus will focus on five interventions: malaria (35%), immunization (25%), HIV/AIDS (15%), nutrition, micronutrients and breastfeeding (15%) and diarrhea (10%). Pneumonia case management will be addressed as part of the holistic CIMCI approach.

The goal of CIMCI-Plus is to reduce morbidity and mortality of children under five and improve the health status of women of reproductive age in the Ntungamo District, by the end of 2008. To reach this goal, CIMCI-Plus has 4 general objectives:

1. To promote knowledge and behaviors related to the prevention of childhood illnesses, at household and community levels;
2. To improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels;
3. To improve accessibility of under-five children and women of reproductive age to quality health services and products, both at facility and community levels; and
4. To strengthen national and district MOH capacity to replicate and sustain the community IMCI approach

CIMCI-Plus will build on the achievements and lessons learned from the first phase. New tools such as Lot Quality Assurance Survey (LQAS) and Institutional Strengths Assessment (ISA) will be applied and will provide an opportunity to consolidate the CIMCI model, based on the



CORE/BASICS Community H/H IMCI Framework. The framework has three elements and builds on strong multi-sectoral platform.

Under Element 1, linkages will be strengthened through outreach services; a facility-supported community health information system; participation of health facility staff in behavior change and communication (BCC) activities; and improvement of facility services provided to the mother and child.

Under Element 2, community services will be expanded with focus on quality of services provided by shopkeepers and traditional birth attendants (TBAs). Commodities including anti-malaria drugs, bed nets and condoms will be more accessible.

Under Element 3, behaviors and appropriate care seeking will be improved through innovative BCC approaches that involve community drama, demonstration, referral and home visiting.

Using matching funds, CIMCI-Plus will continue to expand multi-sectoral platform activities of water and sanitation, vegetable gardens, aquaculture and animal husbandry.

During CIMCI phase I, Africare studied and quantified the immediate effect of CIMCI on facility utilization, revealing an increase of 97%. CIMCI-Plus will provide an excellent opportunity to monitor this effect over time and for projecting facility and other needs. CIMCI-Plus will look at qualitative factors influencing care-seeking patterns for dangerous practices such as “Oburo” (*millet*<sup>1</sup>) and “Ebiino”<sup>2</sup> (*tooth extraction*), from client and traditional healer perspectives, for the development of BCC strategies to address these practices. Results from operations research efforts will be shared with local partners during review meetings, with the central MOH and national NGOs. Africare will also disseminate this information in CORE meetings nationally and internationally.

CIMCI-Plus is consistent with USAID/Uganda strategic objectives and intermediate results. It has strong support from the Government of Uganda, national and local partners, including Ntungamo District Health Services, health sub-district personnel, facilities and sub-counties. Throughout the development and preparation of the detailed implementation plan, starting in October 2003, Africare consulted and involved the aforementioned national and district level partners.

The Ministry of Health has embraced the Ntungamo CIMCI project as their model project for implementing IMCI component 3 and also made Ntungamo a priority district for IMCI components 1 and 2. To ensure sustainability, CIMCI-Plus will partner with the MOH and other partners including Development Network for Indigenous Voluntary Associations (DENIVA) and Uganda Red Cross Society (URCS) to create a united front of CIMCI advocates to promote the child survival agenda.

Dr. Jessica Kafuko, Project Management Specialist of the USAID Mission in Kampala, was consulted during the design of the DIP. The primary authors of the detailed implementation

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<sup>1</sup> *Millet disease is a folk disease, which attacks the child's chest. Treatment is done by extracting or cutting the chest skin to remove the millet-like nodules. This often results into death of the child.*

<sup>2</sup> *Ebiino is a folk disease that is perceived to be caused by maggots inside the child's gum causing the child irritation thus diarrhea. As a method of treatment, the maggots are extracted from the gum using sharp materials. This disease normally occurs during the normal teething of the child which mothers confuse with maggots.*

plan are Robert Mwesigwa Program Coordinator (Ntungamo); Atukunda Innocent, Research/Monitoring and Evaluation Officer (Ntungamo); Denis Nuwagaba, Behavior Change Communication Specialist (Ntungamo); Abdalla Meftuh, Africare Country Representative (Kampala); Kendra B. Dibinga, Health Programs Manager (HQ); and Alan Alemian (HQ). The contact person at Africare/Washington, D.C. for the CIMCI-Plus Project is Alan Alemian, East/West Anglophone Regional Director.

## **B. CSHGP DATA FORM**

Please see annex 6 for the information on the CIMCI Project and the Rapid Catch Indicators.

## **C. DIP PREPARATION PROCESS AND START-UP ACTIVITIES**

The DIP is a result of concerted efforts by Africare and key partners. CIMCI-Plus initiated a participatory process of DIP preparation in October 2003 that began with establishing effective partnerships with a plethora of stakeholders to create a common vision and strengthen partner links. Partners that were consulted include: the Ntungamo District Health Team, District and Sub-county leaders, Community Resource Persons (CORPs), USAID Mission, the IMCI Unit of the Ministry of Health, Makerere Institute of Social Research (MISR) and partner NGOs. The DIP was developed in line with CIMCI national policy and implementation guidelines and CSTS technical reference materials.

Start-up activities carried out to date include: (1) Negotiation and signing of the CIMCI-Plus memorandum of understanding with Ntungamo District Local Government (**Annex 4**); (2) Conduct and analysis of a baseline KPC survey to guide program priorities, strategies and setting of specific objectives and indicators; (3) Assessment of existing community structures: Community Resource Persons (CORPs), parish development committees (PDCs), child care workers (CCWs), traditional birth attendants (TBAs), women groups and drama clubs in the target sub-counties; (4) A two-day district and national stakeholders' workshop to review and set end-of-project targets and indicators; (5) Recruitment, orientation and posting of field staff in the sub-counties who continue introducing the program and guide communities to draw up resource maps, oriented five community drama groups about the 16 key household behaviors and are actively involved in immunization revitalization activities; (6) Five stakeholders' sensitization workshops to introduce CIMCI and to discuss their roles and responsibilities were held in five sub-counties reaching over 350 community leaders and resource persons; (7) Commencement of a new complimentary community-based integrated management of natural resources and HIV/AIDS project<sup>3</sup> in Nyakyera and Itojo sub-counties; and (7) Presentation of a paper on the multi sectoral approach at a CORE-organized workshop in Washington, D.C. of the approaches, lessons and experiences of CIMCI at the national level.

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CIMCI-Plus will continue consultative meetings with district and national level partners through information sharing, continued discussion of roles and responsibilities and organizing quarterly review meetings during implementation of planned activities.

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<sup>3</sup> Africare received \$120,000 grant under the Environmental Conservation Trust of Uganda (ECOTRUST) mechanism of the USAID Mission for 18 months (beginning January 2004) for a Community-based Integrated Management of Natural Resources and HIV/AIDS project. To-date, the project has constructed six shallow wells, two spring tanks, thirty-energy saving cooking stoves and one-water tank.

## **D. REVISIONS (FROM THE ORIGINAL APPLICATION)**

There are no any changes on the original application including the budget. The five project interventions, immunization, malaria control, diarrhea control, nutrition, breastfeeding and micronutrients and HIV/AIDS, remain the focus of CIMCI-Plus.

## **E. DETAILED IMPLEMENTATION PLAN**

### **1. Summary of Baseline and Other Assessments**

**Types and Methodology of Baseline Assessments:** CIMCI-Plus conducted a baseline KPC survey in January 2004. It utilized the KPC 2000+ tool, which was adapted to program interventions. CATCH indicators were also incorporated. The WHO/EPI 30 cluster sampling technique was used. The population and the number of households were obtained from the 2002 Uganda Population and Housing Census. 304 mothers with young children under five years were interviewed. Two index children were considered i.e. the youngest and the oldest among the under fives. The survey instrument was pre-tested in non-intervention sub-counties before actual data collection.

The survey was carried out in all seven CIMCI-Plus intervention sub-counties. Fourteen enumerators and two supervisors selected from the District Health Services were trained over a three-day period. Each enumerator administered an average of seven questionnaires per day. Refer to detailed survey report in **Annex 3**.

Qualitative data were collected to supplement the KPC survey data. The data were collected through focus group discussions with mothers of children under five years. One focus group discussion was conducted in each of CIMCI-plus sub-counties.

The data were recently reanalyzed to only look at those mothers with children under 2 years of age. This report reflects this analysis using data gathered from 199 mothers of children under 2. This change was made to ensure adherence to USAID guidelines.

### **Baseline Findings Summarized**

A total of 199 mothers were interviewed. 48.0% of the mothers were in 25-34 years age bracket, while 41.4% were less than 24 years and 10.6%, in the 35-44 years group. The average age of the mothers was 26.5 years. 66.8% reported that they could read and write in vernacular, while 33.2% could not read or write. 92.5% reported they were married. 82.4% of the mothers were engaged in income generating activities. 60% of the mothers were working away from home and of these, 62.2% took their children with them to the place of work. A total of 206 children under two were found in these 199 households. However, the data reported here only reflects the youngest child under 2, for a total of 199 children under 2. Of these, 49.2% were males while 50.8% were females. 30.2% were below 6 months, 21.6% were aged 6 to 11 months, and 48.2% in the 12-23 months age group.

**Salient findings related to nutrition, micronutrient and breastfeeding were as follows:** 76.7% of all children 0-5 months were exclusively breastfeeding at the time of the survey. Among those aged 6-11 months, the majority (97.7%) was still breastfeeding. It was interesting

to note that among children aged 12-23 months, 70.8% were still breastfeeding while 25% of the mothers said that they stopped breastfeeding their children at the age of 12-23 months. 64.3% of the mothers interviewed breastfed their children within the first hour after delivery, while 23.1% said they took about 2-8 hours and 10.6% took more than 8 hours. 73% of the mothers reported that a breastfeeding child should be given additional food at the age of six months.

Focus group discussions with mothers revealed that mothers often give water to newly born babies before initiating breastfeeding. The explanation given is that mothers take some time to produce breast milk after delivery. Mothers sometimes start giving children additional foods early because of the children demand for food when they are still young. Even if they are breastfed many times in a day, they do not get satisfied.

**Salient findings related to diarrheal diseases were as follows:** 31.2% of the children had had diarrhea in the two weeks preceding the survey. Only 8.7% of children with diarrhea were treated with ORS at home. 10.7% of the children who had diarrhea in the two weeks preceding the survey were breastfed more than usual, 53.6% same as usual, while 25% were breastfed less than usual. 27.8% of the children were given more fluids than usual while 18.5% received less than usual. 53.7% of the children were given the same amount of fluids. 11.6% of the children who had diarrhea and had already started eating some food, were reported to have received more food than usual while 48.8% had received the usual amount of food, and 39.5% had received less than usual. The households with designated hand washing facilities with soap/ash present that mentioned the importance of washing hands after defecation to prevent diarrhea were only 4%. 61.7% of the children who had diarrhea in the two weeks preceding the survey received treatment from home while 38.3% were taken outside the home for treatment. Of the children who received treatment from home, 60.9% were given herbal treatment and only 19.6% got anti-diarrheal/antibiotics treatment. Treatment sought outside home was from government health facilities/clinics (53.9%), drug shops (28.2%), private physicians (7.7%) and government hospitals (2.6%)

The most common ways of getting diarrhea as perceived by mothers were eating with unwashed hands (29.6%) and eating cold food (25%). Lack of latrine (19.6%), worms (19%) and drinking unboiled water (11%). Other perceived causes of diarrhea that featured in the discussions were breast-feeding a child when the mother is pregnant, false teeth (ebiino) and the development of the normal teeth. 45.2% of index children were taken for false teeth extraction. It emerged from the discussions that mothers commonly give local herbs (chewed and orally administered) to children with diarrhea.

**Salient findings related to Immunization were as follows:** 58.8% of the mothers had vaccination records for their children. Only 52.1% of children 12-23 months were fully immunized before their first birthday. 38.1% of children between the ages of 6-23 months received measles vaccine. 69% of mothers had received tetanus toxoid during their last pregnancy. However, only 28.6% received at least two tetanus toxoid injections before the birth of their youngest child.

Some of the factors mentioned that discourage participation of mothers in immunization of their children included: side effects such as children developing fevers, misconceptions about safety of vaccines, health workers failing to maintain outreach schedules and long distances to immunization centers.

**Salient findings related to malaria were as follows:** The baseline survey results show that 29.8% of the children had fever in the two weeks preceding the survey. 15.6% of the households visited used an ITN the night prior to the survey. However only 14% of children under 2 slept under an ITN the previous night. Out of the 48 children who had fever and were breastfeeding, 66.7% were breastfed more or same as usual. 64% of children with fever were given same or more solid/mashed foods. Out of 58 children that had fever, 48.3% received treatment at home before seeking treatment outside home. The most common form of treatment that children with fever received at home was mainly Panadol/maxadol (59.3%), Cloroquine/qawaquine/malaraqine (59.3%) and traditional herbs (18.5%). The proportion that received Fansidar, Quinine or Aspirine was only 3.7% in each case. 58.3% of mothers took anti-malarial drugs during the last pregnancy to prevent malaria. Main Sources of treatment for fever outside home constituted drug shops (36.5%), government health facility/clinic (32.7%) and private physicians (17.3%). Results from the focus group discussions reveal that the first action mothers take when their children fall sick is to treat them at home involving both western and local therapy. 10.65 of the children were taken for millet extraction in the last 12 months.

**Salient findings related to HIV/AIDS are as follows:** 99.5% of mothers had heard about HIV/AIDS. 68.8% were able to cite at least two known ways of avoiding HIV/AIDS. The commonly mentioned symptoms associated with HIV/AIDS were loss of weight (70.7%), skin rash (46.5%), cough (27.8%), diarrhea (16.7%) and persistent fever (13.6%). Common ways of avoiding HIV/AIDS were abstinence (78.4%), use of condom (51.8%) and limiting sex to one partner (31.2%). Respectively, Mothers believed that HIV/AIDS could be transmitted from mother to child during pregnancy (65.7%), delivery (85.4%) and breastfeeding (57.6 %). Only 5.5% of the mothers reported having ever tested for HIV/AIDS.

During discussions with mothers, it was reported that some people are not willing to go for HIV test because they believe that once they know they are HIV positive, they will die quickly. Some mothers also said it is not good to test for HIV because when outsiders learn that they are positive, they can squander their property thus leaving nothing for the children.

**Care Seeking Behaviors:** Mothers consult neighbors (55%), mother in-law (36.1%), medical doctors (6.5%) and community health workers (10.1%). The conditions mentioned by the mothers that prompt them to take a child immediately to a health facility were fever (70.4%), child becomes sicker (38.7%), difficulty in breathing (25.6%), inability to breast feed or drink (20.6%), fast breathing (14.6%), vomiting (14.1%) and drinking poorly (12.6%). Only 17.9% of the mothers reported that they take the child to a health facility immediately after they recognize that the child is ill. The major factors mentioned by mothers that hinder utilization of health services were financial costs (65.5%) and long distance (13.2%). 60.1% of the mothers interviewed live within less than five kilometers from a health unit. 32.8% of the mothers traveled five or more kilometers to the health facilities. Answers related to visitation of communities by health workers revealed that 74.9% believed that health workers had never visited the communities, 24.6% sometimes, and 0.5% always.

### **Comparison of Baseline Findings with Country Context<sup>4</sup>**

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<sup>4</sup> This section presents data from various sources. There seems to be some discrepancies in data between various studies. This is partly on one hand, due to much data that is aggregated especially at the national level leaving out details that could be useful for comparison; and due to different studies which adapt and use different tools in data collection and analysis on the other hand. However, the disparities have no significant negative impact on the picture being described in this document.

The 2001 Uganda Demographic and Health Survey (UDHS) estimates current infant and child mortality at 88 and 152/1,000 live births, respectively, and the maternal mortality rate at 505 maternal deaths per 100,000 live births. Located in the Western Region, Ntungamo health indicators are worse than the national average. UDHS estimates that infant and child mortality of the Region is 98 and 176/1,000 live births respectively. These are grossly under-reported in the district due to weak births/deaths registration. The district Health Management Information Systems (HMIS) recorded only 77 deaths of under-five, during 2001. Though disease-specific mortality for Ntungamo District is not available, major morbidity causes for children under five include malaria, diarrhea, malnutrition and acute respiratory illnesses.

According to the 2001 Roll Back Malaria (RBM) baseline assessment in the four districts of Apac, Tororo, Mubende and Kabale (neighboring Ntungamo District), between 39% and 44% of recorded outpatient visits were due to malaria. It is estimated that between 70,000 and 100,000 people die from malaria each year, the great majority of them being children under five years. However, management of malaria fevers is still poor: only 28% of those patients seen at a health facility were managed correctly and only 7% of caretakers of children under-five years sought treatment within 24 hours. According to the 2001 Ntungamo District records, 46% of children attended government facilities with malaria. In CIMCI Plus baseline, 29.8% of children under two were reported with fever, during the two weeks prior to the survey.

The 2001 UDHS revealed that only 13% of households in Uganda had mosquito nets. The survey further showed that mosquito nets are less likely to be available in households in the western region than in other regions (6% compared to 15%). Eighteen percent of children under-five who live with their mothers sleep under a net and 7% slept under a net the night before the survey. As mosquito nets are less likely to be available in the western region children in this region are also less likely to sleep under a net.

The 2003 Family Care Practices study by UNICEF found bed net use among children in Uganda to be very low with only 20% of children below 24 months of age slept under a mosquito net the night before the interview. In comparison, the Ntungamo CIMCI-Plus KPC baseline survey indicated that only 14% of children 0-23 months were sleeping under insecticide treated nets. Whereas district records indicated that at least 46% of children were taken to a government facility, CIMCI-Plus Survey found only 32.7% of children with malaria were taken to a government health facility/clinic.

Irrational drug use poses a problem in treatment of acute respiratory infections (ARI). Project experience indicates common confusion among fever, malaria and ARI. As with diarrhea, some ARI episodes are diagnosed as *millet* disease and are referred to traditional healers.

The proportion of children who are fully immunized in Uganda has been dropping since 1995, from 47% in 1995 to only 37% in 2001. Most children (84%) receive one round of immunizations, but only 37% receive all five rounds. As many as 63% of mothers do not know when their child needs his or her next immunizations (MOH 2003). The 2001 UDHS found that 29% of children are fully immunized by 12 months of age as recommended. Thirteen percent of children 12-23 months had not received any of the recommended vaccines. The results also show that the drop out rate for DPT is 40% and the rate for polio was 36%. The immunization coverage in Uganda is reported to be 47.4% of the 12-23 months age group. There is significant drop out between the first and third doses of DPT and polio of 25% and 28%, respectively. Only 60% of children 12-23 months old receive measles vaccine while 45% receive the vaccine

before their first birthday. Using both history and card, the 2003 UNICEF study on family care practices 76%-100% of children had BCG vaccination, 38%-74% had DPT3 vaccination and only 26-50% had measles vaccination within the first year across the districts.

In 1998 and 1999, UNEPI carried out a series of reviews and studies, which revealed serious gaps in knowledge and practice, areas that are critical for delivery of quality immunization services in all the districts. These areas include; EPI target diseases, EPI vaccines, Cold Chain, Injection Safety, organizing immunization sessions, screening and registration of clients, preparing vaccines during the session, giving immunizations social mobilization, Vitamin A supplementation, After session and monitoring immunization coverage.

The Ntungamo District Health report (2001-2002) indicates that immunization coverage dramatically decreased during the period from 1996 to 2000 reaching 69% for BCG, 54% for DPT3, 56% for Polio, 49% for Measles with an estimated 38% of children 12-23 months fully vaccinated. Maternal coverage for TT is reported at only 18%. Several elements contributed to the decline in immunization coverage, in recent years. The local FM radios broadcast unsubstantiated messages related to side effects of vaccines, leading many mothers to stop taking children for immunization. Because physical accessibility to facilities is limited, many caretakers rely on outreach vaccination sessions; but health workers do not consistently follow the immunization schedule. At the health facility level, immunization sessions are short and not integrated with antenatal care. Also mothers fear that the vaccines may be contaminated with HIV/AIDS, lameness, sickness, and death after immunization especially by injection.

The 2001 UDHS found a higher prevalence of 20% of children under- five years having had diarrhea in the last two weeks before the survey. The prevalence of diarrhea was highest among children aged 6-11 months (38%). The risk of diarrhea decreases as the child grows, thus the lowest level was found among children 48-59 months (8%). The UDHS found that nine in ten mothers (92%) knew about the use of ORS packets for treating diarrhea. In the Uganda National Household Survey it is indicated that Oral Re-hydration Salts (ORS) seems to be used more in central and eastern regions than in other regions. The same survey revealed that 45 % of children who had diarrhea in the two weeks preceding the survey were taken to a health facility for treatment. According to the findings of the 2001 UDHS only 28% of the children who had diarrhea in the two weeks preceding the survey were given more fluids than usual, while 31% were given the same amount of fluids. Four in ten children with diarrhea were given less fluid or non at all. Only 5 percent of the children were given more food than usual, while 51 percent were given less food or none at all.

The family care practices study by UNICEF conducted in 2003 found that only 41% of children on exclusive breastfeeding had breastfeeds increased during a diarrhea episode. Among children on complementary feeding, 40% had increased amounts of drinks and 24% had increased amounts of foods. ORS was given in 64% of children with diarrhea; home made recommended fluids to 56% and salt/water solution to 16%.

The 2001 UDHS found that water was available in 14% of the households surveyed, soap in 10% of the households and a basin in 17% of the households. Only 4% of the households had all the three hand washing materials. CIMCI plus KPC survey revealed that only 4% had handwashing facilities with soap/ash present.

The 2000/01 Uganda Demographic and Health Survey (UDHS) indicated that stunting in Uganda was quite prevalent. Stunting prevalence stands at 39%. Fifteen percent are severely stunted. The prevalence of stunting is lower among children under six months and increases with age. The highest prevalence (5) is among children aged 16-23 months. Stunting is more prevalent in rural areas, in Western Uganda and among children whose mothers have had no education.

Wasting was found to be more prevalent among children 10-11 months (11%) corresponding with when complementary feeds have just been introduced. According to the WHO prevalence data of 1998, it is estimated that the prevalence of iron deficiency anemia (IDA) in Uganda is slightly above 50%. About 30% of maternal deaths are believed to be due to anemia, the majority of which is attributable to IDA.

The UNICEF Family Care Practices study in Uganda show that 59% of the children under two years were initiated on breast milk within the first hour of birth. Between 33-76% of children 0-6 months are exclusively breastfed. 64% of children start feeding on complementary foods by five months while continuing to breastfeed. By 20-23 months of age, only 29% are still breastfeeding.

The 2001 UDHS shows that about one third of the babies are put to the breast within one hour of birth, while 86% initiate breast feeding in the first day of life. Two in three children younger than six months are exclusively breastfed; the proportion among children 6-9 months is only 9%. The C-IMCI Plus baseline survey showed that 97.7% of children aged 6-11 months were still breastfeeding.

In the Western region where Ntungamo is located, the UDHS estimates that 48% of children under four are stunted, the highest proportion in the country. By UDHS estimates, more than 55% of children suffer from anemia and around 29% suffer from Vitamin A deficiency. Many caretakers are unwilling to administer colostrum. Protein rich foods such as rabbit meat are affordable, but not culturally accepted in some communities. Lack of access to immunization also affects uptake of Vitamin A supplements.

In 2000, among those that tested for HIV/AIDS at two testing sites in Ntungamo, 20.7% to 22.6% were found positive. Prevalence was higher among the older groups and among females. However, these percentages are likely to be much higher. Only three health facilities are conducting VCT services (Kitwe, Rwashamaire and Itojo health units). More recent figures from these sites reveal a high positivity rate of 16.4% among clients who tested. This is exceptionally high compared to recently declared national figures of about 6.1%. In addition, HIV/AIDS infection among infants in Uganda has increased from 88 to 300 out of 1000 live births per year. (WHO Country Annual Report) The 2001 UDHS shows that only three methods to avoid infection with HIV/AIDS are widely known, namely, using condoms (spontaneously mentioned by 54% of women and 72% of men), abstaining from sexual relations (50% of women and 65% of men), and having only one sexual partner (49% of women and 43% of men). A sizeable proportion of respondents (14% of women and 5% of men) know that AIDS can be avoided but do not know a particular method to avoid contracting the disease. Thirteen percent of women and five percent of men either believe that there is no way to avoid AIDS or do not know whether AIDS can be avoided. According to baseline survey in the proposed program area, as many as 36.3% of the population does not know that AIDS can be transmitted from mother to child – almost four times the national figure of 11%.



According to the 2003 UNICEF study, the commonly used practices of protection by mothers against HIV/AIDS were faithfulness (48%), use of condoms (24%), abstinence (13%) and avoiding sharing sharp objects (10%). Qualitative results indicate that women caregivers have little information on effective HIV prevention measures. Fifty one percent of the mothers did not know where to take an HIV/AIDS test. Sixty seven percent of the mothers were willing to have an HIV/AIDS test and to disclose the results to an immediate family member.

Knowledge related to transmission of HIV/AIDS from mother to child is far from satisfactory in Ntungamo. Only 65.7% and 57.6% of mothers knew that HIV/AIDS could be transmitted from mother to child during pregnancy and breastfeeding respectively. Stigma associated with HIV/AIDS is widespread, making it hard to seek counseling, particularly for pregnant women. Use of condoms with a non-regular partner is lower in women (38%) than in men (59%), reflecting the greater role men play in deciding condom use. The community-accepted norm is abstinence prior to marriage. This makes it socially difficult for youth to seek condoms and/or services related to sexually transmitted diseases.

### **Constraints to Achieving Program Objectives**

Major constraints envisioned during the implementation of CIMCI-Plus include: (1) Low revenue base of Ntungamo District and inadequate resources for local NGOs/CBOs to complement the role of Africare. Africare and the District will build NGOs/CBOs' capacity in program development, resource mobilization and linkages with the donor community; (2) Cultural taboos and practices that could be overcome through health education; (3) As Behavior Change Communication efforts expand, increased demand for quality services may stretch the resource capability of District health facilities leading to drug stock outs and inadequate supply of insecticide treated nets (ITNs). As in CIMCI phase I, Africare will work with the Ntungamo District Health Services to project and plan for increased demand, so that required resources are allocated; (4) Motivating community structures and change agents, such as PDCs, CORPs and TBAs, is always a challenge, since those who volunteer time and labor also must handle their own daily chores. As during CIMCI phase I, CIMCI-Plus will use non-monetary incentives such as badges, pins, calendars, t-shirts and bed net samples to reward and encourage good performances; (5) Communities sustaining the project though possible is challenging. As in CIMCI phase I, the project will encourage the sub-counties to integrate key project activities in their development plans and budgets to organize refresher courses for community resource persons to share new information and experiences, support supervision of the structures and water source maintenance; (6) Building CIMCI-related capacity of community structures like PDCs can be time consuming, even causing implementation delays in some communities. Under CIMCI-Plus, the program will continue to establish a cadre of district and sub-county trainers, allowing for parallel (as opposed to sequential) training, which will improve the timely initiation of activities in all target communities; and (6) Staff turnover at health facilities may result in attrition of IMCI case management skills provided in the past. The commitment of the District and the Ministry of Health to CIMCI-Plus will allow continuing mobilization of resources to support IMCI case management training to new staff.

### **Most up-to-date Coverage estimates in Service Area**

The most up-to-date coverage estimates were derived from the CIMCI-Plus KPC baseline survey that was conducted in January 2004. Please refer to baseline survey report in **Annex 3 and the section on Baseline Findings Summarized.**

### **Most Recent Disease Surveillance Data for Program Area**

On a weekly basis, the Epidemiological Department of the Ugandan MOH, compiles a report on notifiable diseases of epidemic potential which include acute flaccid paralysis, suspected rabies, cholera, dysentery, guinea worm, malaria, measles, meningitis, neonatal tetanus, plague, typhoid fever and sleeping sickness in the 56 districts constituting Uganda, including Ntungamo. The data is presented every Monday, in the daily newspaper, *The New Vision*. For example, the report for the week ending July 4, 2004, in Ntungamo District, 4,701 cases of malaria and 4 deaths due to malaria were reported. Also, 11 cases of animal bite (suspected rabies) were reported.

On the quality of data, national and Ntungamo district staff are carefully selected, trained and provided with manuals (Training Modules on Integrated Disease Surveillance and Response for Health workers) as well as support supervision. There is an efficient radio call communication network between the MOH, DDHS office and HSD levels that help in collecting most up to date information, which is shared with relevant departments at the MOH level for action. On completeness of reporting, Ntungamo District is among the best districts with coverage of health units that report ranging from 80-100%. The surveillance system captures only data on government facilities.

### **Ministry of Health Policies, Strategies and/or Case Management Policies or Current Services**

To address the challenges facing Uganda, the MOH developed a Health Sector Strategic Plan (2000/01 – 2004/05) whose goals are to: (a) Increase access to the Uganda National Minimum health care package<sup>5</sup>, with special attention to access for the poor, difficult to reach and disadvantaged; (b) Improve quality; (c) Reduce inequities related to accessibility of services; (d) Recruit, train and rationally deploy and motivate qualified staff; (e) Rehabilitate current structures and building new structures for underserved populations; (f) mobilize communities and encourage participation; and (g) Improve coordination and management of resources.

**Malaria:** The Malaria Control Program (MCP) has four main intervention strategies: case management, vector control, intermittent presumptive treatment of pregnant women and epidemic preparedness and response.

Case management policy as provided for treatment of malaria is underlined by the Home-Based Management of Fever (HBMF) whereby home based presumptive treatment for all fevers with unit dose of pre- packs of anti-malarial drugs for under-fives is recommended. The MCP has launched a serious campaign code named HOMAPAK to promote management of malaria using a combination of chloroquine and sulphadoxine-pyrimethamine (CQ/SP). There are specific red packets for children between 2 months and two years and green packets for children aged 2 to 5 years. Caretakers are expected to treat all children presenting with fevers with the anti-malarials within 24 hours of onset.

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<sup>5</sup> The minimum health package includes (1) Control of communicable diseases; (2) Integrated management of childhood illnesses; (3) Sexual and reproductive health and rights; (4) Environmental health; (5) Health education and promotion; (6) School health; (7) Epidemic and disaster prevention, preparedness and responses; (8) Improving nutrition; (9) Interventions against diseases targeted for elimination or eradication; (10) Strengthening mental health services; and (11) Essential clinical care.

According to the 2002 anti-malarial drug policy, SP and Chloroquine taken in combination form the first line treatment. The second line anti-malarial drug is quinine tablets. Still, with severe malaria the recommended treatment is quinine injection. As per the policy guidelines, the second line treatment should only be given when first line treatment of SP and chloroquine have failed or is contra-indicated. This includes a child presenting with uncomplicated malaria who has taken HOMAPAK before coming to the health facility. If the patient has severe malaria, an initial dose of quinine IM should be given and then the patient referred immediately. If the patient has signs of severe malaria and presents at a health center with admission, laboratory and IV infusion facilities, they should be treated according to the guidelines of diagnosis and management of severe malaria.

All pregnant women are expected to receive two doses of SP as intermittent presumptive treatment of malaria: one in the second trimester and one in the third trimester as part of the antenatal care package. The strategy is to be scaled up by integrating it into maternal services at both facility and community levels and creating demand for the services.

The key interventions under vector control are the promotion of insecticide treated nets (ITNs) and indoor residual spraying (IRS). ITNs are currently considered the most effective method of malaria prevention in highly endemic areas. While children under five are the primary target, other vulnerable groups including pregnant mothers are encouraged to acquire and use ITNs. The promotion of ITN use is implemented through a public-private approach. Major implementers include NGOs, the commercial and public sectors.

The MCP instituted activities to check epidemics principally in three distinct phases namely before, during and after the epidemic. Before the epidemic, some activities such as community mobilization, health education and monitoring of malaria cases at health facilities are undertaken to prepare communities. During epidemics the MCP ensures prompt mobilization and distribution of resources, swift sharing of information, and easy mobility of patients to treatment centers. After the epidemic, MCP reviews its experiences with the contained epidemic so as to document and use them in the future.

**HIV/AIDS:** Policies that address HIV/AIDS care, prevention and control in Uganda follow. (1) *HIV/AIDS Policy of 1999*. This includes prevention and control of STI/HIV through a program of intensive IEC aimed at promoting responsible sexual and reproductive behavior, sexual and reproductive counseling, HIV counseling and testing, wide use of condoms, prompt treatment of STIs, universal blood safety, reduction of mother to child transmission, palliative care, promotion of community involvement in the care of patients with AIDS and mitigation of socio-economic impact of the epidemic will constitute the core elements of this component. (2) *Policy Guidelines on Feeding of Infants and Young Children in the Context of HIV/AIDS*: These guidelines address key issues regarding infant feeding in the context of HIV/AIDS. (3) *The policy for Reduction of the Mother-to-Child HIV Transmission*: This policy addresses key issues related to prevention of mother-to-child transmission (MTCT) of HIV including anti retroviral therapy; voluntary counseling and testing (VCT); infant feeding; support for mothers and infants and other interventions for reduction of MTCT.

The HIV/AIDS policies and interventions have greatly contributed to the control and possible reduction of HIV in Uganda. With the advent of major advances in anti retroviral therapy and research of HIV vaccines still in infancy stage, Government cautiously initiated a pilot project to make available anti retroviral drugs in the country in 1998.

**Diarrhea:** With the advent of IMCI, the current recommended treatment practices are based on the Ministry of Health National IMCI Treatment Guidelines. The IMCI algorithm describes how to assess and classify sick children with signs of diarrhea.

**Immunization:** The Uganda National Expanded Programme on Immunization (UNEPI) was established in 1983 with the main objective of making immunization integral to other primary health care services in an effort to reduce morbidity, disability and mortality caused by the targeted immunisable diseases. These diseases at the time included tuberculosis, whooping cough, diphtheria, poliomyelitis, neonatal tetanus and measles. Hepatitis B and Haemophilus influenza type B were included among the target in 2002. The UNEPI was developed within the context of the provisions of the Health Sector Strategic Plan and the National Health Policy, which are in turn guided by the provisions of the Constitution of the Republic of Uganda (1995), and the Local Governments Act (1997).

The broad strategies of UNEPI include: (1) Revitalization of routine immunization as the primary focus of the program; (2) Conducting supplemental immunization activities against targeted diseases; (3) Improving communication skills among health workers to enable them communicate effectively to parents, guardians, caretakers, policy makers, politicians and other leaders; (4) Provision and maintenance of an effective cold chain and logistics system at all levels; (5) Strengthening technical and administrative support supervision and guiding the provision of pre-service and on the job training; (6) Strengthening partnership with other child health promoting programs, agencies, NGOs, religious organizations, and the private sector in service delivery and social mobilization; (7) Enhancing advocacy, social mobilization and health education; (8) Ensuring constant supply of Auto disabling Syringes and needles (ADS) and safe disposal of all medical wastes; (9) Strengthening and maintaining a surveillance system of immunisable diseases with particular focus to neonatal tetanus, poliomyelitis and measles using the Integrated Diseases Surveillance (IDS) approach; (10) Promoting monitoring, investigation and management of adverse events following immunization (AEFI); (11) Adopting and using internationally recommended approaches and guidelines that are relevant to Uganda and;(12) implementing other innovative strategies that will benefit the unreachable.

The immunization schedule begins at birth with BCG and polio and ends at 9 months with a dose of measles antigen. By the first birthday each infant needs to have completed all the doses. All women in childbearing age need to complete five doses of tetanus toxoid for full protection against maternal and neo-natal tetanus.

The targeted age groups for UNEPI are 0-11 months and all women of childbearing age (15-45 years) both pregnant and non-pregnant. All other un-immunized children below five years are also eligible for vaccination. Booster doses may be given as recommended by the Ministry of Health to children at five years or more at school entry and in post primary institutions.

Supplementary immunization doses may be given to specified target groups in accordance with the national, regional or global goals to control/eliminate maternal, neonatal tetanus and measles, or eradicate poliomyelitis. The target groups for supplemental immunization are determined according to the epidemiological pattern of the disease in the country.

**Nutrition, Micronutrients and Breastfeeding:** The nutritional status of the population, particularly children and women is poor and has been identified as a major health problem in

Uganda. The department of community health recommends a multi-sectoral approach in implementation of strategies to improve the nutritional status of the population. The MOH guidelines on breastfeeding recommend that children be breastfed within the first 30 minutes of delivery and be exclusively breastfed for six months, introduce supplementary feeding and continue breastfeeding up to 23 months. Breastfeeding is part of national IMCI algorithm, which health workers follow when counseling mothers.

The current recommended treatment practices are based on the Ministry of Health's National IMCI Treatment Guidelines. The IMCI algorithm describes how to assess and classify sick children with signs of malnutrition and anemia including counseling the mothers on child's feeding. At present interventions for prevention of anemia particularly among pregnant women include: (1) encouraging them to attend antenatal care at least four times during which they receive iron and folic acid tablets to boost their hemoglobin during pregnancy; and (2) women undergo physical and laboratory examinations to assess the levels of hemoglobin during pregnancy.

### **Overall Quality of Existing Services**

The major provider of health services in the district is the Ntungamo District Health Services (NDHS). The District Health Team (DHT), chaired by the Director for Health Services, provides the overall coordination of health services in the district. The Ntungamo DHT benefited from the Project in terms of quality supervision, monitoring and evaluation and development of linkages between communities and the health system. Within Uganda's decentralized system, the sub-county level is involved in planning of health services, and holds a local health budget that can be tapped for CIMCI initiatives. District Council led by the District Chairperson draws up district policies and oversees quality of services. The district council was key in advocating for resources, mobilizing communities in the original 8 Project sub-counties and during the signing of the CIMCI-Plus MOU, the Ntungamo local government re-affirmed their commitment and support.

The entire district is served by 10 government-employed medical doctors, 2 of whom are in administration, 15 clinical officers, 3 registered nurses, 63 enrolled nurses and 28 enrolled midwives. About 37% of these providers have case management training in IMCI. 113 nursing assistants/aides, whose knowledge and skills come mainly from informal on the job training, constitute half (49%) of all providers. The 14 Health Assistants (HA) based at facilities, provide community support and health education on an ad-hoc basis. However, the 12 dispensaries in the proposed CIMCI-Plus extension area are served by only 2 clinical officers, 14 enrolled nurses, 5 enrolled midwives, 29 nurse assistants, and 7 health assistants. There are nationally developed standard guidelines used by health workers for case management of illnesses among the children.

A district hospital became available to the district only in 2001 when Itojo sub-county joined the district. The hospital is in a debilitated condition and lacks clean water supply. The district using the Poverty Alleviation Fund (PAF) and the Ministry of Lands, Water and Environment has started work on a gravity flow scheme to address the water issue. Three referral health centers and 12 dispensaries provide services in the proposed CIMCI-Plus extension. Child health activities at these facilities are primarily curative. Preventive services are limited to immunizations, some prenatal care and family planning. IEC activities are very limited in these facilities. All services are provided free after the elimination of the cost share provision in 2001.

Some Health Unit Management Committees (HUMC) established to help in management of cost-share funds and strengthen the relationship between communities with health facilities are no longer very functional except at health sub-district (HSD) level. Facilities are under staffed and there is a shortage of drugs. In an attempt to improve the situation, under phase I the project conducted an outpatient assessment (OTA) study, results of which were shared with DHT and local policy makers leading to 10% increment on drug allocation budget. In addition more health staff were recruited and re-allocated to handle work overload.

The existing HIV/AIDS services include: VCT at four centers in the District, PMTCT has just been initiated at four centers that include: Itojo Hospital, Kitwe, Rwashamaire and Rubaare mini-hospitals and are expected to expand especially with support from AIM program and UNICEF Other partners include TASO, UWESO, Ntungamo District Health Services and AIC. They address pertinent issues related to stigma and discrimination, home based care for PLWAs and orphans, awareness creation and prevention activities.

Communities rely to a great extent on the private sector for treatment of common childhood illnesses. According to a 2001 MOH study, *private practitioners* (PPs) provide care for 75% of children. 28% of PPs are shopkeepers and drug sellers. Adome et al (1996) estimated that only 23% of pharmaceuticals are obtained from the public sector. The largest suppliers of drugs are shops, the *dukas*, where people buy staples, and public markets. Shopkeepers are untrained and often operate illegally. Traditional Healers (TH) provide traditional care but also perform dangerous practices such as tooth extraction. TBAs inform and counsel mothers in relation to childhood illness. In September 2002, in recognition of the role of PPs, the MOH IMCI Unit and the National Malaria Control Program developed the *National Strategy for Utilizing the Potential of Private Practitioners in Child Survival*. Africare's expanded work with PPs in Ntungamo follows this strategy.

Uganda has made a strategic policy to make the private sector a major partner in national development by encouraging and supporting private practitioners in providing healthcare in areas not effectively served by public facilities. The objectives of the strategy are: (1) Improve private practitioners practices related to case management and childhood malaria, diarrhea and ARI; (2) Improve private practitioners' skills in recognizing severely ill children and referring them; (3) Support private practitioners in providing suitable child preventive services, and (4) Increase the proportion of private practitioners who are registered with government regulatory bodies.

According to the CIMCI-Plus KPC baseline survey, more than half of mothers consult with relatives and neighbors, regarding child sickness. Mothers consult neighbors (55%), mother in-law (36.1%), medical doctors (6.5%) and community health workers (10.1%). Major determinants for using a health facility include a worsening condition, fever and/or inability to drink or breastfeed. Decisions to seek care outside the home lie with the head of the household who is, in most cases, the husband.

Malaria is mostly treated based on the manifestation of fever. An estimated 88.1% of children with fever seek care, but only 32.7% go to government health facilities/clinics with a trained provider. 36.5% obtain treatment from a drug shop or *duka*, often receiving incorrect dosages. The main reasons for using these shops include proximity to home, ability to negotiate price, dose and type of drug, ability to buy on credit, faster and friendlier service, and skepticism of the government system. Most women consult their neighbors who are not qualified health

professionals. They include shopkeepers who give them incorrect doses. The Ministry of Health with support from SARA Project under the Public Private Partnership Program is targeting these groups to negotiate them out of these bad practices. The Project will complement this effort by encouraging communities to seek care from qualified health workers and to negotiate them out of the harmful practices that relates to children's health. Alternative means of survival for these groups will include encouraging them to sell the mosquito nets where they obtain profits. Since physical accessibility to health facilities is limited, many mothers and caretakers rely on outreach vaccination but these are not consistently followed by health workers and contributes to high drop out.

Most children with diarrhea are treated with traditional herbs (60.9%), ORS (8.7%) and commercial anti-diarrheal treatments including antibiotics (19.6%). 45.2% cases are attributed to 'false teeth' (*Ebino*) and referred to a TH for tooth extraction. Health and hygiene practices are deficient due to lack of water and sanitation facilities. Irrational drug use poses a problem in treatment of acute respiratory infections (ARI). Project experience indicates common confusion among fever, malaria and ARI. As with diarrhea, some ARI episodes are diagnosed as *millet* disease and are referred to THs for *millet* extraction.

## **2. Program Description by Objective, Intervention and Activities**

### ***Goal and Objectives of CIMCI-Plus***

By the end of 2008, Africare and MOH will have contributed to a reduction of morbidity and mortality of children under-five and have improved the health status of Women of Reproductive age in the 15 sub-counties of the Ntungamo District of Uganda. In contribution to this goal, the project will have the following four general objectives:

1. To promote the knowledge and behavior related to the prevention of childhood illnesses, at the household and community levels;
2. To improve the home management of the sick child by promoting timely and appropriate care seeking at the household and community levels;
3. To improve the accessibility of under-five children and women of reproductive age to quality health services and products, both at the facility and community levels.
4. To strengthen national and district MOH capacity to replicate and sustain the community IMCI approach.

To achieve the above goals and objectives, CIMCI-Plus will build on the achievements and lessons learned from the first phase, and will provide an opportunity to consolidate CIMCI model, based on CORE/BASICS *Community H/H IMCI Framework*. The framework has three elements and builds on strong multi-sectoral platform. Under Element 1, linkages will be strengthened through outreach services; a facility-supported community health information system; participation of health facility staff in behavior change and communication (BCC) activities; and improvement of facility services provided to the mother and child. Under Element 2, community services will be expanded with focus on quality of services provided by shopkeepers and traditional birth attendants. Commodities including anti-malaria drugs, bed nets and condoms will be more accessible. Under Element 3, promotion of 16 key family practices for disease prevention, improved decision-making, home treatment and care seeking for childhood illnesses will be a central focus under this element. Innovative BCC approaches such as community drama, demonstrations, referral and home visiting will be used. The project will use a trainers' of trainers (TOT) strategy to train sub county trainers who will train the

Community Resource Persons (CORPS) and Parish Development Committees (PDCs) while working with project staff. In the phase out period, the sub county trainers together with health workers will continue follow up activities during and after the project period.

Using matching funds, CIMCI-Plus will continue to expand multi-sectoral platform activities of water and sanitation, vegetable gardens and animal husbandry, income generation through working with different district sectors and other local CBOs, FBOs and NGOs.



## CIMCI-Plus Project Result frame work

| Indicators   | Benchmarks   | Measurement methods                         | Major Planned Activities  |
|--|--------------|---|---|
| <b>Objective 1. To promote knowledge and behaviors related to the prevention of childhood illnesses at household and community levels</b>  |              |   |   |
| <b>Malaria</b>   |              |   |   |
| The number and percentage of children aged 0-23 months who slept under an insecticide treated nets   | 14% to 25%   | Baseline, midterm, final KPC, LQAS and CHIS | BCC activities, training of PDCs and CORPs, bed net club schemes, linking communities to suppliers like PSI, Quality Chemicals, and establishment of ITN outlets at sub-county level. . |
| The percentage of pregnant mothers who received IPT during pregnancy at the 4 <sup>th</sup> and 7 <sup>th</sup> months                     | 5.5% to 20%  | Baseline, midterm and final KPC, LQAS       | BCC activities, training of PDCs and CORPs, availability of anti-malaria drugs at the facilities and strengthening child and antenatal services.  |
| <b>Immunization</b>  |              |   |   |
| Percentage of children age 12–23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday | 52.1% to 65% | Baseline, midterm and final KPC             | BCC activities, training of PDCs, CORPs immunization mobilizers, supervision of facility vaccination services and support to community immunization outreach sessions.                  |
| Percentage of children 12-23 months that received measles vaccine  | 38.1% to 50% | Baseline, midterm and final KPC, HMIS, CHIS | BCC activities, training of PDCs, CORPs immunization mobilizers, supervision of facility vaccination services and support to community immunization outreach sessions.                  |

| Indicators  | Benchmarks   | Measurement methods                            | Major Planned Activities   |
|---|--------------|--|--|
| before their first birthday   |              | and LQAS                                       |  |
| Percentage of mothers who received at least two tetanus toxoid injections before the birth of the youngest child 0-23 months                | 28.6% to 40% | Baseline, midterm and final KPC, HMIS and LQAS | BCC activities, training of PDCs, CORPs immunization mobilizers, supervision of facility vaccination services and support to community immunization outreach sessions. |
| <b>HIV/AIDS</b>   |              |  |  |
| The percentage of mothers with children 0-23 months who cite that HIV/AIDS can be transmitted through pregnancy, delivery and breastfeeding | 36.2% to 50% | Baseline, midterm and final KPC survey         | BCC activities on PMTCT, training community counseling aides and linking mothers to VCT/PMTCT centers.   |
| The percentage of mothers with children 0-23 months who cite at least two known ways of avoiding HIV/AIDS                                   | 68.8% to 80% | Baseline, midterm and final KPC survey         | BCC activities, working with women groups and post test clubs to disseminate key messages, refresher training of counseling aides                                      |
| The percentage of mothers with children 0-23 months who indicate that they can allow an HIV positive child to play with theirs              | 39.9% to 80% | Baseline, midterm and final KPC survey         | BCC, working with post test clubs, drama clubs refresher training of CCAs and encouraging home visiting  |
| <b>Nutrition,</b>   |              |  |  |

| Indicators   | Benchmarks | Measurement methods             | Major Planned Activities  |
|--|------------|---------------------------------|---|
| <b>Breastfeeding and Micronutrients</b>  |            |                                 |   |
| The percentage of children 0-5 months who were exclusively breastfed   | 77% to 90% | Baseline, midterm and final KPC | BCC activities, training of PDCs and CORPS and application of positive deviant approach and formation of mothers support groups.  |
| The percentage of children 0-23 months who were breastfed within the first 60 minutes of delivery  | 64%-80%    | Baseline, midterm and final KPC | Educate and sensitize communities on the importance of colostrums in protecting children from diseases through BCC strategies and formation of mothers support groups               |
| The percentage of mothers of children 0-23 months who indicated that children should be exclusively breastfed for six months   | 73% to 85% | Baseline, midterm and final KPC | Educate and sensitize communities on the importance of colostrums in protecting children from diseases through BCC strategies and formation of mothers support groups               |
| <b>Control of Diarrheal Diseases</b>   |            |                                 |   |
| The percentage of households with designated hand washing facilities with soap/ash present that mentioned the importance of washing hands after defecation to prevent diarrhea | 4% to 10%  | Baseline, midterm and final KPC | BCC activities, training of PDCs, CORPs water user committee members on water and sanitation and establishing locally improved hand-washing facilities. For demonstration purposes. |
| <b>Objective 2. To improve home management of the sick child by promoting timely and appropriate care</b>  |            |                                 |   |

| Indicators   | Benchmarks   | Measurement methods             | Major Planned Activities  |
|--|--------------|---------------------------------|---|
| <b>seeking at the household and community levels</b>   |              |                                 |   |
| <b>Malaria</b>   |              |                                 |   |
| The percentage of children 6-23 months with fever that were given same or more fluids                | 75.5 to 90%  | Baseline, midterm and final KPC | Educate and sensitize communities about the importance of maintaining/increasing fluids to a child with fever through interpersonal communication, home visiting, |
| The percentage of children 6-23 months that were given same or more solid/mashed foods               | 64% to 80%   | Baseline, midterm and final KPC | Educate and sensitize communities about the importance of maintaining/increasing foods to a child with fever through drama, health education and home visiting.   |
| Percentage of children 0-23 months who were taken for millet extraction                              | 10.6% to 4%  | Baseline, midterm and final KPC | Mobilize and educate communities for prompt care seeking from qualified health personnel  |
| <b>Control of Diarrheal Diseases</b>   |              |                                 |   |
| The percentage of diarrhea sick children 6-23 months that were given same or more solid/mashed foods | 60.4% to 75% | Baseline, midterm and final KPC | BCC activities, nutrition education, training for PDCs and CORPs.   |
| The percentage of diarrhea sick children 0-23 months that were given same or more fluids             | 81.5% to 92% | Baseline, midterm and final KPC | Educate and sensitize communities about the importance of maintaining/increasing fluids to a child with diarrhea.   |
| The percentage of children 0-23 months   | 8.7% to 15%  | Baseline, midterm and           | Educate and sensitize communities about the importance of ORS and other fluids to a child with  |

| Indicators  | Benchmarks   | Measurement methods  | Major Planned Activities   |
|---|--|--|--|
| with diarrhea who were treated with ORS   |  | final KPC  | diarrhea   |
| Increase the % of mothers with children 0 – 23 months who can prepare ORS correctly   | 4.5% - 10%   | Baseline, midterm and final KPC                            | BCC messages on correct preparation of ORS                                       |
| The percentage of mothers with children 0-23 months who can identify two signs of diarrhea requiring treatment  | 69.8% - 80%  | Baseline, midterm and final KPC                            | BCC messages on recognition of signs and symptoms                                |
| The percentage of children 0-23 months who were taken for false teeth extraction  | 45.2%-30%  | Baseline, midterm and final KPC and focus group discussion | BCC activities, negotiation with traditional healers                             |
| <b>Objective 3. To improve accessibility of under five children and women of reproductive age to quality health services and products at both the facility and community levels</b> |  |  |  |
| <b>HIV/AIDS</b>   |  |  |  |
| The percentage of mothers with children 0-23 months who go for HIV testing  | 6% to 10%  | Baseline, midterm and final HIV/AIDS survey                | BCC activities, facilitation of post test clubs to disseminate HIV/AIDS messages |
| Number of condoms distributed   | Increase number of condoms distributed in the project area | Supervision and Field officers reports                     | BCC activities, facilitation of post test clubs to disseminate HIV/AIDS messages |

| Indicators  | Benchmarks   | Measurement methods                    | Major Planned Activities   |
|---|--|--|--|
|   | from the current 12,960 to 50,000  |  |  |
| Number of mothers who receive PMTCT services  | Increase the percentage of mothers in the project area receiving PMTCT services from the current 30 to 210   | Supervision and Field officers reports | BCC activities, facilitation of post test clubs to disseminate HIV/AIDS messages |
| <b>Objective 4. To strengthen National (MOH) and district capacity to replicate and sustain CIMCI</b> |  |  |  |
| The number of the specified structures trained and active.  | Capacity building for: 40 Sub-county trainers; 900 CORPS, 100 PDCs; 7 CBOs; 84 immunization mobilizers; 150 TBAs, 100 water user committee members; 48 CCAs, 21 women/drama groups; and 60 health workers. | Supervision and Field officers reports | Training and refresher courses.  |
| Number of bi-annual   | Documentation  | Field officers                         | Compiling reports/newsletters and other  |

| <b>Indicators</b>   | <b>Benchmarks</b>  | <b>Measurement methods</b>   | <b>Major Planned Activities</b>                         |
|---|--|--|---|
| newsletters, quarterly reports and annual reports produced. | of project lessons and experiences through bi-annual newsletters (8) quarterly reports (15) and annual reports (5) | reports, KPC surveys, HMIS, Operation and formative research findings. | documentation on a timely basis and disseminating them. |

### 3. Intervention Specific Approach: BCC, Access and Quality

The CIMCI-Plus project will adapt the BEHAVE framework as an overall and crosscutting strategy that will be applied for all interventions. This strategy will be used in understanding and addressing the enabling and limiting factors for behavior change of all project interventions.

The Ministry of Health and partners have developed a household and community IMCI communication strategy as a basic guide or tool for behavior change. The strategy spells out the sixteen household and community practices grouped in four main categories: (i) Growth promotion and development; (ii) Disease prevention; (iii) Home management of a sick child; and (iv) Care-seeking and compliance. The strategy will be implemented by (i) mobilizing partners and resources at all levels; (ii) improving the quality of interpersonal communication at health facilities; (iii) intensifying dissemination of messages and support positive action at community and household levels; (iv) strengthening the linkages between communities and health facilities; and (v) developing appropriate supervision, monitoring and evaluation tools.

#### **Malaria (35% effort)**

According to the CIMCI-Plus baseline survey, malaria is still a problem in target communities. 29.8% of the children studied were reported to have had fever in the two weeks preceding the survey. CIMCI-Plus identified the following community practices and beliefs as barriers to behavior change: associating convulsions locally known as *ebihungu*, with ancestral spirits and thus requiring traditional means of treatment, seeking care for children with malaria and difficult breathing from traditional healers to treat the *millet disease*. It is believed that malaria is caused by eating mangoes, drinking un-boiled water, rain and drinking concentrated milk. The treatment involves an incision being made on the child's chest using sharp metallic and often un-sterilized instruments to extract the "*millet*".

To address the above barriers, the malaria BCC strategy will focus on malaria control and prevention activities that include: Improved malaria disease recognition, promotion of early care seeking for childhood malaria, use of insecticide-treated mosquito nets, including regular re-treatment of nets, and promotion of intermittent presumptive treatment (IPT) for pregnant women. Key BCC messages will focus on: how malaria is transmitted, importance of children and pregnant women sleeping under insecticide treated nets, and how nets can be used whether people sleep on a floor or a bed, recognition of signs and symptoms of malaria, home management of fever (giving a child the same or more fluid/foods during sickness), reliable sources for anti-malaria drugs, drug compliance, where to seek medical care and advice in the first 24 hours of the onset of malaria. Messages will be delivered through appropriate channels that include drama and film shows, health education sessions, distribution of IEC materials and home visiting.

To ensure the quality of messages CIMCI-Plus will follow the MOH communication strategy for child survival, growth and development. The project will use experienced BCC staff; CORPs and implementing partners (supervised by the project BCC specialist and health sub-district medical officers) to sensitize and educate caretakers to further enhance the quality of messages. A positive deviant approach to behavior change will be applied to influence caretakers' household practices and discourage harmful practices. The positive deviant approach will be employed using mothers who have successfully managed to prevent malaria using ITNs to influence other mothers to take up the practice. CIMCI "Model homes" will be identified and communities will be encouraged to learn from their positive practices. In addition, exchange visits to learn from the experiences of CIMCI phase I sub-counties will be encouraged during CIMCI-Plus implementation.



Major activities will include training of health workers (60), PDCS (100) and community own resource persons (900), community awareness and sensitization, formation of social support groups (bed net clubs), increasing accessibility of ITNs at sub-county level, advocacy for sufficient drugs at the health facility level, support dipping and re-dipping of mosquito nets and active participation in national malaria days. CIMCI-Plus will sensitize caretakers, women of reproductive age and men for behavior change. School children will also be targeted with messages to disseminate at school and communities through school choirs. Field officers will support the process of forming the mosquito nets clubs in the communities to increase their purchasing power by pooling resources as was in phase I. At least three (3) bed-net groups will be formed in each of the target sub-counties. The project will also support the district efforts to treat and retreat mosquito nets at the community level through community mobilization and health education during the exercise. As part of advocacy activities, the project will actively participate in national malaria days where key malaria experiences will be shared with others. Project staff will be encouraged to participate by erecting malaria stalls. Staff will also learn from other partners to bring new ideas that reinforce our practices. To sustain behavior change outcomes such as mosquito net use and early care seeking, the project will ensure that awareness activities are integrated in the sub-county development plans.

To increase access to ITNs, the project has already and will continue to dialogue with private sector distributors such as PSI and Quality Chemicals Limited to establish at least one outlet in each of the target sub-counties at ordinary shops and/or registered private clinics. CIMCI-Plus will not directly be involved in the procurement and sale/distribution of ITNs. The purchase and supply of ITNs at the sub-county level will be sustained through encouraging household income generating activities by linking beneficiaries to existing micro-credit institutions. The project will negotiate with private suppliers to supply ITNs at subsidized rates. Since the suppliers will earn profits, they will be motivated to continue the supply. The MOH has embarked on scaling up the national voucher system to maximize access of ITNs at subsidized prices particularly for children and pregnant women. The system was tested and proved a potential strategy to maximize ITN access in the country. In addition, the government is in the process of obtaining global funds to supply approximately four million free ITNs to the most vulnerable groups. This will further increase ITNs accessibility.

The MOH recently introduced a home-based management of fever strategy in under-fives using a pre-packaged combination of chloroquine and fansidar (homapak) as the first line of treatment. The new policy is currently in 30 districts excluding Ntungamo. However, with support of The Global Fund, the MOH is in the process of scaling up to the remaining 26 districts including Ntungamo to have the complete national coverage. Under the policy, MOH and Africare will provide BCC messages, training of community based drug distributors in support of this policy. CIMCI-Plus will thus follow the WHO "Roll Back Malaria" (RBM) strategy. The strategy includes: (i) case management; (ii) IPT for pregnant women; (iii) vector control; and (v) epidemic prevention, preparedness and response. The project will contribute to this strategy through the malaria BCC approach as explained above. To enhance access and sustain anti-malaria drugs supplies, the project will continue to advocate for their consistent availability at health facilities and in the community through DHT meetings and meetings with key decision makers.

The CIMCI-Plus M&E system will improve on health facility data management, report compilation and utilization to enable the district use data to influence district drug procurement and allocation procedures without unnecessary delays that are frequently caused by either delayed submission of reports, requisitions and/or poor drugs projections from health facilities. Using operations research, the project will conduct an in-depth study about the millet disease and use information to design appropriate messages to eliminate the practice.

### **Immunization (25% effort)**

This intervention was added in response to the compelling need for improved immunization coverage due to a marked decline in the numbers of children being fully immunized. Based on the recent CIMCI-Plus survey, only 52.1% of children 12-23 months were fully vaccinated before their first birthdays. This is attributed to the high drop out rates. The drop out rate results from failure of health workers to follow routine immunization outreach schedule, short and inadequate immunization sessions that are not integrated with antenatal care at health facilities, mothers beliefs that vaccines may contain the HIV virus, and a belief that children fall sick and die after national immunization days.

To address the above practices and beliefs, the BCC immunization strategy will focus on: education and sensitization of communities to fully immunize their children before the first birthday and pregnant women to receive at least two tetanus toxoid injections. CIMCI-Plus will disseminate the following key messages to overcome the barriers, (1) immunization is safe, free of charge and protects the children from the eight diseases that can kill or disable children, (2) importance of caretakers following the immunization schedule, (3) all women to complete five doses of tetanus toxoid injections and (4) give vitamin A to a child to develop strong immunity against diseases. Health workers and field officers will disseminate the messages during static immunization and immunization outreaches. Others message disseminators will include community resource persons, immunization mobilizers, sub-county extension staff, school children, village leaders and private providers. The project BCC specialist, District cold chain officer, monitoring and evaluation officer and health unit will supervise message dissemination to ensure that correct messages are delivered and to suitably respond to any emerging issues that may hamper behavior change. The project will work with MOs to optimize schedules of immunization sessions at health facilities, taking into consideration current patient flows and mothers' perceptions. In-charges will ensure that immunization sessions are carried out at announced days and times, and that vaccinators are available during these schedules. CIMCI-Plus will focus on message dissemination since this is an area that was identified as a gap by the DHT.

Major activities under immunization intervention will include: training; support and strengthening of immunization outreach; community mobilization and sensitization; strengthening women groups, faith based organizations (FBOs), CBOS and NGOs especially URCS to actively promote immunization; household competitions; monitoring and supervision; distribution of IEC materials and active participation in national immunization days through mobilization and sensitization of mothers and caretakers to take children at the immunization posts during the exercise. CIMCI-Plus project will train health workers (60), drama clubs (21) and parish mobilizers (84), and COPRS (900) in communication skills, immunization safety, organization of static and outreach activities, or other skills that may affect community members' decisions to use immunization services. These structures and groups are linked together by the NGOs/CBOs forum in the district and the community development department, which bring them together both at the Sub-county and district levels. The project will work with groups that are recognized by the Sub-county and the district. The project will support immunization outreach through joint planning, mobilization and sensitization of communities to utilize available services. Other mobilization strategies will include home visits, education sessions, and drama/film shows. As part of the sustainability strategy of positive immunization household behaviors, the project will involve CBOs, women groups and FBOs in planned immunization to maximize coverage and sustain mobilization activities beyond the project life.

The project will also support 'child days'. This will be a bi-annual activity (May and November) by MOH to revitalize immunization. Other activities that take place on child days include de-

worming and vitamin A supplementation. The project will support the activity by mobilizing communities to bring children to designated posts and health facilities. Household competitions will be held once in the middle of the project and relevant prizes like ITNs, hand washing facilities will be given to motivate best performing households in practicing 16 key behaviors including vaccinations to encourage others to emulate positive behaviors. IEC materials on immunization translated in the local language will be distributed. To enhance quality of immunization activities, the project M&E Specialist, health in-charges and the cold chain officer will routinely monitor and supervise activities using EPI checklists. CIMCI-Plus will use the IMCI facility surveys and LQAS to collect information to use to evaluate and monitor the immunization performance in the program area. The data will be used to track immunization coverage over time. Formative research will also be conducted to find out why the health workers are not consistently following routine immunization outreach schedules.

The project will also support and actively participate in national immunization days. Community mobilization and awareness creation prior and during the exercise will be Africare's central role. The MOH through EPI has a well-established cold chain network that ensures steady supply of vaccines all the time. Static immunizations are carried out at all the health facilities in the District once a week and each health facility carries out weekly outreach activities on a weekly basis. There is no problem associated with access of vaccines envisaged in target communities.

#### **HIV/AIDS (15% effort)**

HIV/AIDS is an additional intervention under CIMCI-Plus with 15% level of effort. The level of effort has been influenced by other partners such as TASO, AIM, AIC and UWESO who are implementing related activities in the district and other Africare match funded HIV/AIDS activities. According to the recent household KPC survey, there is stigma and discrimination of PLWAS. Only 39.9% of mothers indicated said that they could allow an HIV positive child to play with theirs. Information from focus group discussions revealed that an HIV positive test induces individuals to die faster, mismanage resources and/or intentionally infect others so as not to die alone. There is limited use of VCT services; only 6% of the women interviewed had gone for HIV testing. There is little knowledge about mother-to-child transmission (MTCT). Only 36.2% of mothers cited that HIV/AIDS can be transmitted through pregnancy, delivery and breastfeeding. Anecdotes indicate that there is limited and inconsistent use of condoms including marital unfaithfulness.

CIMCI-Plus will work closely with health workers to create awareness about PMTCT and voluntary counseling and testing (VCT) services and will link communities to the health facilities for service utilization. Messages aimed at reducing stigma and discrimination will also be emphasized. Key messages on PMTCT will include not breastfeeding at all for newborn children by HIV positive mothers, exclusive breastfeeding for the first three months or six months and stop to introduce complementary feeding, encouraging pregnant women to seek VCT services to ensure access to nevirapine in the case of sero-positivity to prevent their children from acquiring the virus. In addition, the project will emphasize that knowing one's HIV/AIDS status helps one plan better one's life through counseling if positive and/or avoid any possible source of transmission if negative.

The project will promote all the three messages during awareness creation campaigns and will refer mothers to the trained health workers for further counseling to make informed decision on the appropriate infant feeding choices. In the communities, the main replacement feeding option, which is also relatively affordable, is cow's milk. The modified formula feeds are not easily accessible and are very expensive for rural mothers. Other messages include treating HIV/AIDS like any other disease and caring for the sick including orphans. CIMCI-Plus will adapt the Uganda Abstain, Be faithful and use Condoms (ABC) model as the BCC strategy. Project

messages on ABC will place emphasis on the prime importance of consistent and correct use of condoms, and fidelity in a relationship.

Key project activities under the HIV/AIDS intervention will include: (1) community mobilization and sensitization, (2) training of community counseling aides, (3) condom distribution, (4) support and participation in World AIDS Days, and (5) support VCT mobile outreach. CIMCI-Plus project will place emphasis on community mobilization and sensitization activities that include: peer health education talks in school and regular community meetings, drama/film shows, IEC materials distribution, and home visiting. Using the BEHAVE framework, audiences will be segmented according to the group of behaviors targeted for change thus avoiding message overload for any given audience. In the same way, specific channels will be selected taking into consideration the effectiveness of each channel in reaching specific audiences. The project will refresh community-counseling aides (48) in basic counseling skills, train CORPS (900), post test clubs (7), PDCs (100) and TBAs (150) in mobilization and communication skills for VCT and PMTCT services. The project will support and participate in major HIV/AIDS events including World AIDS Day. On such events, testimonies from community members who have changed their behavior will be encouraged. Key government officials will be involved to witness and advocate for services such as VCT and MTCT.

The project will use training manuals developed by TASO and MOH. The project will partner with the NDHS; AIDS Integrated Model District Program (AIM); The AIDS Support Organization (TASO); AIDS Information Center (AIC); and Uganda Women's Efforts to Save Orphans (UWESO) to ensure the quality of BCC messages and training. Other partners will include FBOs and CBOs to scale up and help sustain message dissemination activities. Monitoring and supervision will be done by the health workers, CIMCI project staff and AIC at health facility levels. AIC produces monthly reports on VCT services that help to monitor progress in VCT and PMTCT service utilization. The partnerships and monitoring activities will help sustain positive behavior changes such as increased care seeking for VCT, PMTCT services and condom use. Access to supplies such as condoms and sexually transmitted infections (STI) drugs are provided by the MOH and will be sustained. The MOH and AIC are providing HIV testing kits. The District has 9 laboratory technicians who also carry out HIV testing, 111 and 20 health workers are trained in PMTCT and VCT respectively. MOH is supporting provision of Nevirapine to pregnant women and newborn children at the four mini-hospitals of Kitwe, Rwashamaire and Rubare and Itojo, district referral hospital. Antiretro-viral Therapy (ART) is only available at the regional hospitals. Ntungamo's clients are referred to Mbarara regional hospital. CIMCI-Plus will continue to be complemented by Africare Title II feeding program that provides food supplementation to people living with HIV/AIDS (PLHA) and orphans.

HIV/AIDS behavior changes such as continued testing and safer sex practices will be sustained through FBOs and CORPS during mobilization and sensitization activities at the community level. HIV/AIDS being a multi-sectoral problem, every sector or department in the district has a program on HIV/AIDS to leverage synergies to sustain behavior change. Any opportunity where people are gathered will be utilized to address issues of HIV/AIDS through constant reminders and advocacy particularly by local area leaders.

#### **Nutrition, Micronutrients and Breastfeeding (15% effort)**

The recent household survey indicated that nutrition; micronutrients and breastfeeding practices are undesirable. Only 76.7% of children 0-5 months were exclusively breastfed at the time of the survey. 70.8% of children 12-23 months continued being breastfed. Focus group discussions revealed that mothers often give water to newborn babies before initiating breastfeeding. The reason is that mothers take some time to produce breast milk after delivery. Mothers sometimes

start giving children additional foods before the age of six months responding to the child's apparent desire to eat. Mothers believe that even if they are breastfed many times in a day, they do not get satisfied. The BCC CIMCI-Plus approach to address barriers under this intervention will focus on the following messages: 1) exclusive breastfeeding of infants up to six months; (2) appropriate complementary feeding after the sixth months of age, and continued breastfeeding until 24 months including emphasis on the value of continuing feeding during illness; (3) appropriate nutritional management of all sick and malnourished children according to IMCI guidelines; (4) Adequate intake of vitamin A-rich foods and/or vitamin A supplements by women, infants and children; and (6) Adequate intake of iron in combination of other micronutrients and other interventions to prevent anemia.

Pivotal activities to enhance the messages and overcome aforementioned barriers will include: (1) Orientation of TBAS (150), CORPS (900) and PDCS (100), (2) community mobilization and sensitization, (3) establishing backyard and front yard gardens (4) rabbit raising and establishment of fish ponds. Orientation of aforementioned structures will be organized and conducted in partnership with district nutrition, veterinary and agricultural officers and community development assistants to provide technical quality assistance and NGOs particularly ADRA and the Kyera Farm project to provide demonstration sessions. Orientation will focus on capacity building skills in raising vegetable nursery beds, rabbit raising and aquaculture, balanced diet and skills in mobilizing and sensitizing others. The project BCC specialist, district agriculture, veterinary and agriculture officers will supervise training activities.

The project will conduct nutrition education sessions through drama, cooking demonstrations and IEC materials distributions. Discussions with mothers revealed that the major barriers to exclusive breastfeeding are inadequate breast milk and early pregnancies. BCC messages will place emphasis on mothers' breastfeeding more often to stimulate milk production and proper feeding for pregnant and lactating mothers. At least 3 cooking demonstrations will be conducted per sub-county over the life of the project to help mothers/caretakers learn how to prepare a balanced diet using locally available foods. In order to address barriers to breastfeeding, the project will apply the positive deviant approach where mothers' support groups will help in demystifying myths and false practices regarding breastfeeding. CIMCI-Plus will promote increased household availability and diversity of food as well as household food security. Using matching funds, CIMCI-Plus will continue supporting the growing of spinach, carrots, eggplant and cabbage. Local rabbit breeds, fish such as melarcup and tilapia will be raised to enhance intake of protein rich foods. In addition, interpersonal communication and positive deviant approach will be applied where mothers doing well will share their good practices to influence behavior change.

As in CIMCI phase I, the project will seek community contributions for these ventures, such as land for gardens, locally available construction materials and fishponds to enable communities own and sustain ensuing benefits. In addition, the project will encourage beneficiaries to generate incomes from surplus T1nom surplus 1ub

approach to diarrhea to overcome the barriers is promoting improved hygiene and sanitation and home-based management using ORS and other locally available fluids. Key BCC messages will include: exclusive breastfeeding for the first six months with emphasis on mothers providing colostrum, proper disposal of feces including children's feces in the latrine; washing hands with water and soap/ash after using the latrine before preparing food, feeding the baby and before eating; giving more or the same amount of fluids/food during diarrhea episode; recognition of signs and symptoms of diarrhea that require immediate treatment and emphasizing that false teeth (which are believed to be maggot-like substances in the child's gum only treated by extraction) in children does not exist and caretakers should desist from taking their children for extraction.

The project will carry out the following activities: (1) Construction of small water supply systems (for example, protected public wells) (2) community mobilization and sensitization (3) training of water user committees (100), PDC (100), TBAs (150) and CORPS (900) and (4) formative/operations research on factors that influence health care patterns for harmful practice of false teeth extraction. This will be done through conducting key informant interviews and focus group discussions on the attitudes, beliefs and practices. Results from OR will be used to design appropriate messages and in the development of concrete strategies for addressing the harmful practices. With matching funds, Africare will work with communities to build and protect water sources such as shallow wells, springs and water tanks at community and health facility levels. The project will train local masons to support the project water specialist in construction and protection of water sources. At least 100 water-use committee members will be trained to protect and sustain water sources. They will be trained in water source maintenance and resource mobilization. Other structures that include TBAs, CORPS and PDCs will be oriented and given skills as change agents in correct mixing of ORS, making simple and affordable hand-washing facilities, community mobilization and communication skills to disseminate key BCC messages. ORS will continue to be provided through the government health facilities and through private providers where possible. Trained structures will also be used to distribute ORS at the community level to ensure its continued access. Health assistants and in-charges, including field project staff, will organize and conduct training activities. The district and county health inspectors including the project BCC specialist will do monitoring and supervision to maximize the quality of training including constant regular distribution of ORS. Training manuals will be obtained from UNICEF, Directorate of Water Development (DWD) and the MOH.

Community mobilization and sensitization activities will focus on promoting sanitation and hygiene at the household level with hand washing facilities, encouraging caretakers to use ORS and readily available fluids mainly from cereals such as porridge and to seek immediate care when the child is sick. Awareness creation channels will include drama shows/films, household visits and distribution of IEC materials on diarrhea. Positive behavior change outcomes such as washing hands after latrine use with soap/ash, correct use of ORS and locally available fluids will be sustained through constant reminders by CORPS and PDCs at household and community levels through mobilization and sensitization activities.

## PARTNERS' INVOLVEMENT IN THE CIMCI PLUS PROGRAM

| PARTNER                            | AREA OF PARTNERSHIP/ COLLABORATION                        | ROLES IN THE PARTNERSHIP   |
|------------------------------------|---|--|
| Ntungamo District Local Government | Malaria, Immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Technical support and advocacy to project activities, integration of project activities in their development plans, co-implementers, monitoring and supervision, provision of health services in project areas, and mobilization of local resources to sustain the program   |
| Ministry of Health                 | Malaria, Immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Policy framework and advocacy, provision of technical reference materials and guidelines, support scaling up the best practices, health workers skills strengthening, equipping health facilities and ensuring steady supplies of essential drugs, health facility assessments, financial support to child days and re-dipping of ITNs |
| WHO                                | Malaria, Immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Provision of technical reference materials, health facility assessments, information sharing and dissemination   |
| UNICEF                             | Malaria, Immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Provision of technical reference materials, co-implementers of CIMCI in the District, information sharing and dissemination, and provide technical support to address PMTCT  |
| Uganda Red Cross Society           | Malaria, Immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Provide access to subsidized ITNs to communities, awareness and prevention activities, training of community resource persons, and sharing IEC materials   |
| AIM                                | HIV/AIDS  | Increasing access to VCT services in the District, provision of financial and technical support to CBOs and FBOs to carry out awareness and prevention activities, information sharing and dissemination and provide technical support to address PMTCT  |
| AIC                                | HIV/AIDS  | Information sharing and dissemination, provision of voluntary counseling and testing services, and financial and technical support to Post-Test Clubs to disseminate HIV/AIDS awareness and prevention messages  |

| <b>PARTNER</b>   | <b>AREA OF PARTNERSHIP/ COLLABORATION</b>                 | <b>ROLES IN THE PARTNERSHIP</b>  |
|--|---|--|
| TASO   | HIV/AIDS  | Training of HIV/AIDS Community-based counseling aides, and provision of HIV/AIDS related IEC materials   |
| Straight Talk Foundation                               | HIV/AIDS  | Provision of IEC materials and conducting a weekly HIV/AIDS straight talk” program on local FM radio stations  |
| Compassionate International                            | HIV/AIDS  | Financial and psycho-social support to HIV/AIDS orphans and other vulnerable children including health and education   |
| PSI  | HIV/AIDS<br>Malaria                                       | Provide access of subsidized ITNs to mobilized communities in target sub-counties and social marketing of condoms  |
| Quality Chemicals LTD                                  | Malaria   | Provide access of subsidized ITNs to mobilized communities in target sub-counties  |
| UWESO  | HIV/AIDS  | HIV/AIDS awareness and prevention activities   |
| ADRA   | Nutrition   | Technical support in vegetable gardens, rabbit raising and cooking demonstrations  |
| Kyera Farm Project                                     | Nutrition   | Technical support in vegetable gardens, rabbit raising and cooking demonstrations  |
| Africare UFSI  | Nutrition   | Technical support in vegetable gardens, rabbit raising and cooking demonstrations  |
| MACIS  | Malaria, immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Provides a national fora for information sharing between the MOH, partners NGOs/PVOs and the private sector in the country particularly on best practices for scaling up |
| Communication for Development Foundation Uganda (CDFU) | Malaria   | Share IEC materials  |
| Sub-county-based CBOs                                  | Malaria, Immunization<br>Nutrition, HIV/AIDS<br>Diarrhea  | Community awareness and sensitization activities and spearhead sustainability efforts at community level by integrating project activities in their work plans           |
| Makerere University                                    | Malaria, Immunization<br>Nutrition, HIV/AIDS,<br>Diarrhea | Provide local consultancy services in data collection and analysis during baseline, midterm and final evaluation surveys   |



| <b>PARTNER</b>     | <b>AREA OF<br/>PARTNERSHIP/<br/>COLLABORATION</b>        | <b>ROLES IN THE PARTNERSHIP</b>  |
|--------------------|--|--|
| DWD                | Diarrhea   | Policy framework on water and sanitation and technical related reference materials on water and sanitation   |
| FBOs               | Malaria, Immunization<br>Nutrition, HIV/AIDS<br>Diarrhea | Community awareness and sensitization activities   |
| CORE               | Malaria, Immunization<br>Nutrition, HIV/AIDS<br>Diarrhea | Provision of technical reference materials, and technical support in documentation and sharing of project experiences at international and national levels |
| Malaria Consortium | Malaria  | Provision of technical materials related to malaria prevention and treatment   |

## Project Sustainability Plan

The CIMCI Plus Project recognizes that sustainability is an important component of the program that requires careful attention over the life of the program. In the context of CIMCI Plus, sustainability is defined as a planned, dynamic and creative process that (a) facilitates the evolution and continuation of program interventions; (b) maintains or expands health benefits achieved through the program and (c) builds on the capacity of local communities and local organizations to carry on the work after the project has phased out. In addition, there are a number of existing synergies which will help sustain both program and health outcomes. These include strong support from the Ministry of Health and the National Government for the CIMCI strategies; strong partnerships with local and national NGOs whose programming are complementary to the CIMCI project and whose capacity to continue on these programs will be built over the next four years through CIMCI; and, finally, the ability of CIMCI to be brought to scale, which is currently an undertaking of the national MOH and its decentralized structures.

Africare's approach to sustainability is based on over 30 years of experience working with communities in Africa. Key strategies to sustain CIMCI Plus are: (1) Partnership building; (2) Capacity building; and (3) Scaling up best practices.

**Partnership building:** The project's partnership strategy is multi-disciplinary, creating new synergies between the public health sector, private sector, NGOs, academia, research and rural communities. The program will continue building linkages by harnessing technical expertise of local academic and research institutions, government agencies and NGOs in order to bring solutions at community level in synergistic and convergent manner. As in phase I, the project will continue partnerships to create shared commitment and understanding in program implementation. This will be achieved through regular and experience-based dialogue, mutual respect and constant consultation.

The District is the major implementing partner and is committed to sustaining CIMCI as portrayed by the words of the District Chairperson **"during phase I, Africare helped us to perceive our child health problems and to find solutions to them. During phase 2, it is our role to work with Africare to further build our capacities, expand and sustain these solutions"**. At the signing of the MOU, the District affirmed her commitment. CIMCI Plus activities will be integrated into the District and sub-county development plans.

**Capacity building:** As in phase I, capacity building will continue to be a major sustainability strategy. CIMCI-Plus will work with and train 900 CORPs, 100 PDCs, 49 community counseling aides, 21 drama/women groups, 150 TBAs, 84 immunization mobilizers, 60 health workers, 40 sub-county trainers and 100 water user committee members. They will be trained to facilitate and sustain the implementation of CIMCI project planned activities at the community level during and after the project period. They will also work to strengthen sustainable linkages between communities and health facilities.

**Scaling up:** The Ministry of Health embraced Africare's CIMCI phase I project as a model for implementing IMCI component three in the country. The project will continue documenting and sharing tools and other experiences that increase project's impact and visibility beyond the geographical limits of the project locations. The primary approach that will be used is that of making the project's experiences known to the wider audience by participating in workshops, conferences and distributing tools developed by the project. Working with Africare's Office of Health and HIV/AIDS, CIMCI Plus will continue a process of rigorous program documentation with a focus on national government and MOH support for the program. Project staff has already begun this process with the documentation of Africare/Uganda's experience using the

multi-sectoral platform to achieve sustained child health outcomes. These efforts will continue as Africare explores other opportunities with the Ministry of Health and its decentralized structures. As this is a follow-on project, Africare will begin to look seriously at the issue of government support and its importance in sustaining project results. Any documentation produced during the life of the project will be shared to the child survival community through such media as the CORE Group.

### **3. Program Monitoring and Evaluation (PME) Plan**

#### ***Current Information System***

There is a health information system in the target area, though it does not sufficiently generate quality data. At the community level, there are community own resource persons (CORPS) trained by BASICS II and PDCs trained by UNICEF. On a quarterly basis, they collect multi-sectoral data that include latrine coverage, water and sanitation, housing status, school children enrollment, immunization coverage, agriculture and household income. Over the last one year, the UNICEF country program introduced an additional tool to capture data on deaths/births for under-fives. This information is compiled on a monthly basis. The data collected are used to inform the district on key household practices, mortality and morbidity trends including community critical needs to use for planning. During phase I, in partnership with DISH II Project, the project focused on training health workers in data collection, interpretation/ analysis and use but there was no refresher training and follow up and support supervision. This was supposed to be done by DISH II, which phased out before end of the CIMCI project thus leaving some gaps in the HIS which CIMCI Plus will address.

At the health facility level, the Ntungamo Health Services uses the national MOH recommended HMIS forms. The forms capture data on care seeking of major diseases including those that relate to childhood illnesses (malaria, diarrhea, malnutrition, ARI and HIV-AIDS), health services utilization and human resources. Health workers collect data and send it to the health sub-district level. From the sub-district, it is sent to the district for basic analysis by the HMIS Officer and then to the MOH for detailed analysis and aggregation. On some occasions, health workers are provided with some skills to be able to use the data in decision-making. However, the health workers' skills are not adequate enough and yet information use is also affected by delayed feedback at the national level. In addition to the HMIS data, the district carries out weekly diseases surveillance on notifiable and epidemic potential diseases to avoid possible widespread of epidemics. There is also on going health facility assessment by the MOH with support from WHO on an annual basis. Africare will supplement information collected from facility assessments by conducting formative/operations research described in this document. Africare will, in addition, and where necessary use the data from health assessments to formulate appropriate strategies that reinforce implementation of the project.

#### ***Linkages Between Community and Facility Data***

Currently, there is minimal linkage between the community level data and health facility data. CIMCI-Plus will create appropriate linkages between the two levels. Both community and health facility data will be reviewed during the quarterly DHT/partners meetings at the district level. To avoid collection of unnecessary and or overlapping data, CIMCI-Plus will use facility-based records and CHIS data for monitoring. For evaluation purposes, additional studies that include KPCs and other studies will be conducted.

A forum at the health facility level will be put in place where health workers and CORPs will meet biannually to share information and take appropriate action. CIMCI-Plus's CHIS will build upon the existing monitoring tool for PDCs developed in CIMCI phase I and on those developed by UNICEF and BASICS II. PDC and CORPS will be responsible for data collection. The

program will build the skills of PDCs and CORPs in the target area. Their training will include use of tools in data gathering, compilation and reporting. The CHIS tools will be modified to capture critical data with focus on children under-five and pregnant women such as bed net use and completion of immunization. Lessons learned will be shared with the central MOH and the NGO community for potential use and replication.

### ***Monitoring and Evaluation Tools***

CIMCI-Plus will use four major tools to monitor and evaluate the project progress: (1) Household KPC survey tools that will be used at baseline and final evaluation. The baseline KPC survey was done at the beginning of the project (January 2004) as part of the project start up activities. (2) LQAS, which will be used to monitor program results. Unlike in phase I, which used the midterm KPC, survey, CIMCI-Plus will employ this method by modifying the KPC tool and using a smaller sample size; (3) HMIS at health facility level to track health care-seeking behavior for intervention areas; and (4) CHIS to track behavior change at household and community levels.

In addition, special studies using simple qualitative and quantitative tools such as focus group discussions will be conducted to collect information on key areas critical to child survival. Information collected from such studies will be used to develop appropriate messages that overcome barriers to behavior change. Project staff particularly the monitoring and evaluation staff and health workers with external technical assistance will be trained in using tools such as LQAS to enhance quality of data. In order to obtain quality and/or reliable data, CIMCI-tailored PRA tools such as resource mapping will be used. Through community PRA, beneficiary communities will obtain information that will assist them in identifying locally available resources for use in addressing child health problems. By empowering beneficiary communities to participate in information collection, they will be able to participate in monitoring and evaluating project progress in their communities. Project staff and partners will be responsible to develop, modify and pre-test tools.

The KPC surveys and LQAS will fetch quantitative data focused on CIMCI-plus catch indicators under each of the five intervention areas. The HMIS tool will gather quantitative data on notifiable and potential epidemic diseases (cholera, dysentery, malaria, measles, neonatal tetanus, acute flaccid paralysis, suspected rabies, guinea worms, sleeping sickness, and plague). Data are compiled by health workers on a daily basis. The CHIS tools will be used to collect information on births and deaths, household practices and community needs. The information will be collected and updated by CORPS and PDCs on a quarterly basis supervised by health assistants. Health workers, CORPS, PDCs and project staff will be trained and/or refreshed on the application of relevant data tools from different sources and utilization to maximize decision making. Close supervision during data collection will be enhanced.

During phase I, the project developed the tool that captures process indicators to include; number of IEC materials distributed, health education sessions, home visits, drama shows mobile cinema shows and other project accomplishments. The Field Officers will, on a daily basis, use the tool from which quarterly and annual reports will be compiled and shared with the donor and other partners. Other reports will include baseline assessments; LQAS, operations research, detailed implementation plans and final evaluation.

The CIMCI Plus Project documentation, monitoring and evaluation plan will entail: (I) KPC household baseline survey at the beginning of the project (January 2004); (II) Midterm evaluation (using LQAS) that will be conducted after two and half years of project implementation (July 2006); and (III) Final evaluation that will be done in July 2008. Operations and formative research activities will be conducted in the initial years of the project (second and

third years) to enable the project generate data that can influence project implementation over the life of the project. In addition, the project will produce bi-annual newsletters, quarterly and annual reports that present project progress, successful stories and other related outcomes that will be used as part of monitoring and evaluation process.

### ***Data Analysis and Dissemination Strategies***

Data collected from KPC and LQAS surveys will be analyzed by the local hired statistician. Trained health workers will analyze data from the HMIS while the DHT and partners will review data from both HMIS and CHIS. Information will be shared through dissemination workshops organized immediately after data have been analyzed. Only key data will be disseminated and presented in a simple manner for easy interpretation to stimulate action at all levels. Consensus workshops will be organized to agree on the next steps. At community level, data will be disseminated in the local language in collaboration with NDHS. At the district level, data will be shared during the quarterly DHT meetings. At the national level, a network of child survival NGOs called Malaria and Childhood Illnesses Secretariat (MACIS) where Africare is the host has been created. This network, in partnership with the MOH, forms the fora for dissemination of key results of programmatic importance including replicability through conferences/workshops. Policy makers and other key decision makers will strategically be invited to attend such workshops to advocate for emerging issues that promote child survival.

Africare HQ will provide support for publication and the dissemination among other PVOs and the global child survival community. As during CIMCI phase I, the project will prepare bi-annual newsletters and circulate them widely among implementing partners. New experiences will be shared through appropriate national and international forums. CIMCI-Plus will continue to host national, regional and international visitors and the donor community to share experiences. Opportunities will be created for program staff at international levels to learn and disseminate experiences such as at CORE-organized meetings.

## Monitoring and Evaluation Matrix

Ntungamo District Health Services Staff (NDHSS) = **1**; Project Field Staff (PFS) = **2**; Consultant Statistician (CS) = **3**; Baseline (BL) = **4**  
 Mid-Term (MT) = **5**; Final Evaluation (FE) = **6**; Ntungamo District Health Service (NDHS) = **7**; USAID = **8**; Ministry of Health (MOH) = **9**; Malaria and Childhood Illness Secretariat (MACIS) = **10**; NGOs = **11**; Communities = **12**; Field Officers (FO) = **13**; Research, Monitoring and Evaluation Officer = **14**; Behavior Change Communication Specialist (BCCS) = **15**; District Health Management Information Systems (DHMIS) = **16**; Monthly = **17**; Quarterly = **18**; Annual = **19**; Bi-annual = **20**

| Indicator  | Data Required   | Data Tools                 | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|--|---|----------------------------|-------------------|------------------|----------------|--------------------|
| <b>Objective 1: To promote the knowledge and behaviors related to prevention of childhood illnesses at the household and community levels.</b> |   |                            |                   |                  |                |                    |
| <b>Malaria</b>   |   |                            |                   |                  |                |                    |
| 1. Increase percentage of children aged 0-23 months who slept under an insecticide-treated net the previous night                              | Number of children 0-23 months of age who slept under an ITN previous night           | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 2. Increase the percent of mothers who took anti-malaria medicine to prevent malaria during pregnancy.   | Percent of mothers who took ant malaria medicine to prevent malaria during pregnancy. | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>Immunization</b>  |   |                            |                   |                  |                |                    |
| 1. Increase the percentage of children 12-23 months who received BCG before the first birthday.  | Percentage of children 12-23 months who received BCG before the first birthday.       | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 2. Increase the percentage of children aged 12-23 months who received DPT3   | Percentage of children aged 12-23   | KPC surveys,               | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |

| Indicator   | Data Required   | Data Tools                 | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|---|---|----------------------------|-------------------|------------------|----------------|--------------------|
| vaccines before their first birthday.   | months who received DPT3 vaccines before their first birthday.  | LQAS and FGDs              |                   |                  |                |                    |
| 3. Increase the percentage of children aged 12-23 months who received OPV3 before their first birthday  | Percentage of children aged 12-23 months who received OPV3 before their first birthday.   | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 4. Increase the percentage of children 12-23 months who received measles vaccine before their first birthday.   | Percentage of children 12-23 months who received measles vaccine before their first birthday.   | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 5. Increase the percentage of mothers of children 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child less than 24 months. | Percentage of mothers who received at least two tetanus toxoid injections before the birth of their youngest child less than 24 months. | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>HIV/AIDS</b>   |   |                            |                   |                  |                |                    |
| 1. Increase the percentage of mothers of children 0-23 months citing that HIV/AIDS can be transmitted through pregnancy, delivery and breastfeeding.                            | Percentage of women of reproductive age citing that GHIV/AIDS can be transmitted through pregnancy, delivery and breastfeeding.         | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |

| Indicator   | Data Required  | Data Tools                 | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|---|--|----------------------------|-------------------|------------------|----------------|--------------------|
|   | who cite   |                            |                   |                  |                |                    |
| 2. Increase the percentage of mothers with children 0-23 months who cite at least two known ways of avoiding HIV/AIDS.                      | Percentage of mothers with children <24 months who cite at least two known ways of avoiding HIV/AIDS.                      | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 3. Increase the percentage of mothers with children 0-23 months who indicate that they can allow an HIV positive child to play with theirs. | Percentage of mothers with children <24 months who indicate that they can allow an HIV positive child to play with theirs. | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>Nutrition, Micronutrients &amp; Breastfeeding</b>  |  |                            |                   |                  |                |                    |
| 1. Increase percentage of children 0-5 months that were exclusively breastfed.  | Percentage of children 0-5 months that were exclusively breastfed.   | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 2. Increase in the percentage of children 0-23 months who were breastfed within the first 60 minutes of delivery.                           | Percentage of children 0-23 months who were breastfed within the first 60 minutes of delivery.                             | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 3. Increase the percentage of mothers who indicate that children should be exclusively breastfed for six months.                            | Percentage of mothers who indicate that children should be exclusively breastfed for six months.                           | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |



| Indicator   | Data Required   | Data Tools                 | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|---|---|----------------------------|-------------------|------------------|----------------|--------------------|
| 4. Increase percentage of children 6-23 months who were fed on vitamin A rich foods the day before the survey.  | Percentage of children 6-23 months who were fed on vitamin A rich foods the day before the survey.    | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 5. Increase the percentage of children 12-23 months that continue being breastfed.  | Percentage of children 12-23 months that continue being breastfed.                                    | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>Control of Diarrheal Diseases</b>  |   |                            |                   |                  |                |                    |
| 1. Increase percentage of households with designated hand washing facilities with soap/ash present that mentioned the importance of washing hands after defecation to prevent diarrhea. | Percentage of households with designated hand-washing facilities with soap/ash present                | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>Objective # 2: To improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels</b>                               |   |                            |                   |                  |                |                    |
| <b>Malaria</b>  |   |                            |                   |                  |                |                    |
| 1. Increase percentage of children 6-23 months with fever that were given same or more fluids.  | Percentage of children 6-23 months with fever that were given same or more fluids.                    | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 2. Increase percentage of mothers with children 0-23 months who reported giving chloroquine and fansidar to febrile children at home  | Percentage of mothers with children <24months who reported giving chroloquine and fansidar to febrile | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |

| Indicator   | Data Required   | Data Tools                 | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|---|---|----------------------------|-------------------|------------------|----------------|--------------------|
|   | children at home.   |                            |                   |                  |                |                    |
| 3. Increase the percentage of children 6-23 months that were given same or more solid/mashed foods during sickness. | Percentage of children 6-23 months that were given same or more solid/mashed foods during sickness. | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 4. Decrease percentage of children 0-23 months who were taken for millet extraction.                                | Decrease percentage of children 0-23 months who were taken for millet extraction.                   | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>Control of Diarrheal Diseases</b>  |   |                            |                   |                  |                |                    |
| 1. Increase percentage of Diarrheal sick children 6-23 months that were given same or more solid/mashed food.       | Percentage of Diarrheal sick children 6-23 months that were given same or more solid/mashed food.   | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 2. Increase percentage of Diarrheal sick children 0-23 months that were given same or more fluids.                  | Percentage of Diarrheal sick children <24 months that were given same or more fluids.               | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 3. Increase percentage of children 0-23 with diarrhea in the last two weeks who were treated with ORS.              | Percentage of children <24 with diarrhea in the last two weeks who were treated with ORS.           | KPC surveys, LQAS and FGDs | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 4. Increase percentage of mothers with  | Percentage of   | KPC                        | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10,       |

| Indicator  | Data Required  | Data Tools                                      | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|--|--|---|-------------------|------------------|----------------|--------------------|
| children 0-23 who can identify at least two signs requiring treatment.   | mothers with children <24 who can identify at least two signs requiring treatment.     | surveys, LQAS and FGDs                          |                   |                  |                | 11 12              |
| 5. Decrease percentage of children 0-23 months who were taken for false teeth extraction.  | Decrease percentage of children 0-23 months who were taken for false teeth extraction. | KPC surveys, LQAS and FGDs                      | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| <b>Objective # 3: To improve accessibility of under five children and women of reproductive age to qualify health services and produces, both at the facility and community levels</b> |  |   |                   |                  |                |                    |
| <b>Malaria</b>   |  |   |                   |                  |                |                    |
| 1. Increase the number of ITN outlets in the project area.   | Number of ITN outlets established in the project area.                                 | Supervisory reports and field officers reports. | 13, 14            | 14               | 17             | 7, 8, 9, 10, 11 12 |
| <b>HIV/AIDS</b>  |  |   |                   |                  |                |                    |
| 1. Increase percentage of mothers with children 0-23 months who go for HIV testing.  | Percentage of mothers with children <24 months who go for HIV testing.                 | KPC surveys, LQAS and FGDs                      | 1, 2              | 3                | 4, 5, 6        | 7, 8, 9, 10, 11 12 |
| 2. Increase number of condoms distributed in the project area.   | Number of condoms distributed in the project area.                                     | Supervisory and field officers reports.         | 13, 14            | 14               | 18             | 7, 8, 9, 10, 11 12 |
| 3. Increase the percentage of mothers in the project area receiving PMTCT services.  | Percentage of mothers in the project area receiving PMTCT services.                    | HMIS reports from Health                        | 14, 16            | 14, 16           | 18             | 7, 8, 9, 10, 11 12 |

| Indicator  | Data Required   | Data Tools  | Data Collected By | Data Analyzed by | Reporting Freq | Circulation        |
|--|---|---|-------------------|------------------|----------------|--------------------|
|  |   | facilities, project supervisory report  |                   |                  |                |                    |
| <b>Objective # 4: To strengthen National (MOH) and district capacity to replicate and sustain CIMCI</b>  |   |   |                   |                  |                |                    |
| 1. Capacity building for 40 Sub-county trainers, 900 CORPS, 100 PDCs, 7 CBOs, 84 immunization mobilizers, 150 TBAs, 100 water user committee members, 48 CCAs, 21 women/drama groups, 60 health workers. | The number of the specified structures trained and active.                      | Supervision and Field officers reports  | 15, 13,14         | 14               | 18             | 7, 8, 9, 10, 11 12 |
| 2. Documentation of project lessons and experiences through bi-annual newsletters (8) quarterly reports (15) and annual reports (5)  | Number of bi-annual newsletters, quarterly reports and annual reports produced. | Field officers reports, KPC surveys, HMIS, Operation and formative research findings. | 13, 14, 16        | 14               | 20, 18, 19     | 7, 8, 9, 10, 11 12 |
| 3. Technical backstopping visits by country office and head quarter's staff.   | Number of visits made by country and headquarter staff.                         | Quarterly and annual reports.   | 14                | 14               | 18, 19         | 7, 8, 9, 10, 11 12 |
| <b>Others</b>  |   |   |                   |                  |                |                    |
| 1. Home visits (5450), health education sessions (5,000), drama presentations (500) IEC materials distributed (30,000)   | Number of Home visits, health education sessions,                               | Quarterly and annual  | 13, 14            | 14               | 17, 18, 19     | 7, 8, 9, 10, 11 12 |

| Indicator | Data Required                                       | Data Tools | Data Collected By | Data Analyzed by | Reporting Freq | Circulation |
|-----------|---|------------|-------------------|------------------|----------------|-------------|
|           | drama presentations<br>IEC materials<br>distributed | reports    |                   |                  |                |             |

## **Strengthening Health Worker Performance and Quality of Services**

The MOH, with other partners such as WHO, will continue to strengthen health worker performance through IMCI training in case management, provision of treatment guidelines and support supervision. At the district level, the MOH will provide overall coordination between partners and will ensure that the needs of health facilities in terms of manpower, equipment and supplies are adequately available. Sub-district Medical Officers (MOs) will provide support to the lower level health facilities and will conduct regular support supervision. Both quantitative and qualitative data that Africare will collect through KPCs, LQAS, and CHIS will be shared in a timely manner with health workers to identify areas that will enhance their monitoring role. CIMCI-Plus will, in target communities, complement this effort through training of health workers in interpersonal communication skills, use of data at the health facility level and training in community IMCI.

CIMCI-Plus, in collaboration with the NDHS, will adopt MOH recommended training manuals including other manuals developed by CSTS and CORE to promote quality of services. To maintain the quality of training, on job training approach will be used, protocols to reinforce consistency of training will be followed, pre- and post-tests to measure the immediate effect of training will be conducted. Evaluation results will serve to refine training materials. Lessons learned from using existing materials will be shared with the national level and other partners. Africare will continue to conduct special studies that enhance the linkages between health facilities and communities.

Africare will exploit partnerships for increasing access of limited essential supplies such as ITNs. The Project will facilitate linkage of communities with the distribution agencies such as Population Services International (PSI) and Quality Chemicals Limited. Critical to the success and the sustainability of the entire CIMCI-Plus project is the ability of the M&E system to monitor progress made in building the capacity of local partners. Africare through its staff trained in ISA will use the ISA methodology to support capacity building efforts of field project staff and the Ntungamo district health workers. Other partners whose capacity will be strengthened will include Uganda Red Cross Society and CBOs at the Sub-county levels to coordinate and sustain CIMCI activities. Their capacity will be built through joint planning and implementation including organizing training sessions for them. Successful application of capacity building tools will be shared at the national level with the MOH and NGO partners for replication. In addition to ISA, capacity building will include training in HH/CIMCI framework, 16 key HH behaviors, practical implementation approaches, monitoring, documentation, planning processes and resource mobilization for CIMCI.

## **Operations Research**

As part of monitoring and evaluation function, the project will integrate operations research (OR) in its design to obtain information critical to enhance behavior change. During CIMCI phase I, Africare studied and quantified the immediate effect of CIMCI on facility utilization, revealing an increase of 97%. CIMCI-Plus extension provides an excellent opportunity to monitor this effect over time, for projecting facility and other needs. The project will repeat this survey for the new subcounties and will look at qualitative factors influencing care-seeking patterns for dangerous practices such as millet and tooth extraction, from client and traditional healer perspectives, to provide information for development of BCC strategies to address these practices. The partnership defined quality methodology in addition to PRA will be key methodologies used to gather these data.

#### 4. WORKPLAN: OCTOBER 1, 2003 – SEPTEMBER 30, 2008

| Major Activities  | Target              | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status           |          |  |
|---|---------------------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|------------------|----------|--|
|   |                     |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |                  |          |  |
|   |                     |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |                  |          |  |
| Objective 1: Promote knowledge and behaviors related to prevention of childhood illnesses at the household and community levels |                     |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |                  |          |  |
| Household   |                     |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |                  |          |  |
| 1. Conduct household visits   | 5,450               | BC             | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                                  | 1, 2, 3          | On-going |  |
| 2. Organize household competitions  | 14                  | BC             |                   |   |   |   | x                 | x | x | x | x                 | x | x | x | x                 | x |   |   |                   |   |   |   |                                    | 1, 2, 4          |          |  |
| 3. Conduct KPC baseline survey  | 1                   | BC             | x                 | x |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    | 4, 5, 6, 7 , 9   | Achieved |  |
| 4. Conduct mid term KPC survey  | 1                   | BC             |                   |   |   |   |                   |   |   |   |                   |   | x |   |                   |   |   |   |                   |   |   |   |                                    | 4, 5, 6, 7, 8, 9 |          |  |
| 5. Conduct final KPC survey   | 1                   | BC             |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   | x |                                    | 4, 5, 6, 7, 8 ,9 |          |  |
| Community   |                     |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |                  |          |  |
| 1. Community mobilization through:<br>• Drama<br>• Film shows<br>• Health education   | 500<br>250<br>5,000 | BC             | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                                  | 2, 4, 10, 12     | On-going |  |

<sup>1</sup> BC = Behavior Change; Q = Quality; A = Access; Field Officer = 1, CORPs = 2, Health Workers = 3; NDHS = Ntungamo District Health Services = 4; Africare Headquarters = 5; Country Office = 6; Statistician = 7; External Consultant = 8; Africare Field Office 9; Africare Field Office Staff = 10; Makerere University = 11; Drama Group = 12; Agricultural Extension Officers = 13; Women Groups = 14; Vet Officers = 15; Fisheries Extension Officers = 16; The Aids Support Organization = 17; AICM = 18; District Health Inspectors = 19; Ministry of Health = 20; Implementing Partners = 21; Parish Development. Committee = 22; District Water Eng. = 23; Ntungamo District Local Government = 24; Malaria and Childhood Illness NGO Secretariat = 25; Sub-county Trainers = 26

| Major Activities  | Target    | Activity Focus | Time Frame        |   |        |        |                   |        |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status           |  |
|---|-----------|----------------|-------------------|---|--------|--------|-------------------|--------|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|------------------|--|
|   |           |                | Year 1 by Quarter |   |        |        | Year 2 by Quarter |        |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |                  |  |
|   |           |                | 1                 | 2 | 3      | 4      | 1                 | 2      | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |                  |  |
| 2. Organize sub-county stakeholders sensitization workshops   | 7         | BC             |                   |   | x      |        |                   |        |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | 4, 10                              | 5 workshops held |  |
| 3. Identify community structures to work within the implementation  | 9         | BC             | x                 |   |        |        |                   |        |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | 1, 4, 10                           | Achieved         |  |
| 4. Disseminate KPC results to:<br>• Sub county staff<br>• District level staff  | 350<br>70 | BC<br>BC       |                   |   | X<br>x | X<br>x | X<br>x            | X<br>x |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | 4, 10                              | On-going         |  |
| 5. Modify and adapt CHS tools   | 2         | Q, BC          |                   |   |        | x      | x                 |        |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | 4, 10                              |                  |  |
| 6. Support supervision and follow up visits to trained structures and staff   | 140       | Q, BCC         |                   |   |        |        | x                 | x      | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 4, 10                              |                  |  |
| Objective 2: Improve home management of the sick child by promoting timely and appropriate care seeking at the household and community levels |           |                |                   |   |        |        |                   |        |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |                  |  |
| Household   |           |                |                   |   |        |        |                   |        |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |                  |  |
| 1. Educate mothers and caretakers on proper preparation of ORS, tepid sponging and appropriate feeding practices during childhood illness     | 42,911    | BC             |                   | x | x      | x      | x                 | x      | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 1, 2, 3, 4, 10, 12, 21             | On-going         |  |



| Major Activities  | Target                | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status |
|---|-----------------------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|--------|
|   |                       |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |        |
|   |                       |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |        |
| 2. Operations research on factors that influence health care patterns for harmful folk “diseases” (millet and false teeth extraction)               | 1                     | BC             |                   |   |   |   | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 4, 10, 11                          |        |
| Community   |                       |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |        |
| 1. Community mobilization through <ul style="list-style-type: none"><li>Drama shows</li><li>Home visits</li><li>Health education sessions</li></ul> | 500<br>5,450<br>5,000 | BC             |                   | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 4, 10, 12, 14                      |        |
| Health Facility   |                       |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |        |
| 1. Conduction formative research on why health workers are not consistent following routine immunization outreach schedules                         | 1                     | BC             |                   |   |   |   |                   |   | x |   |                   |   |   |   |                   |   |   | x |                   |   |   |   | 4, 10, 11                          |        |
| 2. Train health workers in the use of data at the facility level to improve linkages between health units   | 60                    | BC, A, A       |                   |   |   |   |                   | x | x |   |                   |   |   |   |                   |   |   | x | x                 |   |   |   | 10, 11                             |        |

| Major Activities   | Target | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status       |  |  |
|--|--------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|--------------|--|--|
|  |        |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |              |  |  |
|  |        |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |              |  |  |
| and communities  |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |              |  |  |
| 3. Bi-annual health workers, PDCs and CORPS meeting at sub-county level to share experiences on home practices and care seeking  | 6      | Q, A           |                   |   |   |   |                   |   | x |   | x                 |   | x |   | x                 |   | x |   |                   |   |   |   |                                    | 2, 3, 10, 22 |  |  |
| 4. Train project staff and health workers in LQAS methodology  | 2      | Q, BC          |                   |   |   |   |                   | x | x |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    | 8            |  |  |
| 5. Modify KPC questionnaire to use at mid- term evaluation, health facility and other assessments  | 1      | Q, BC          |                   |   |   |   | x                 | x | x | x |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    | 10, 11       |  |  |
| District   |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |              |  |  |
| 1. Quarterly DHT and partners review meetings  | 14     | A, Q           |                   |   |   |   |                   | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                                  | 9            |  |  |
| Objective 3: Improve accessibility of under-five children and women of reproductive age to quality health services and products, both at the facility and community levels |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |              |  |  |
| Household  |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |              |  |  |
| 1. Establish backyard and front yard gardens to improve vitamin A in-take  | 4,200  | A              |                   |   |   |   |                   |   | x |   | x                 |   | x |   | x                 |   |   | x |                   |   |   |   |                                    | 9, 13        |  |  |

| Major Activities   | Target | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status   |
|--|--------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|----------|
|  |        |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |          |
|  |        |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |          |
| 2. Promote and demonstrate the use of locally improved hand washing facilities               | 400    | A, BC          |                   |   |   |   |                   | x | x | x | x                 | x | x | x |                   |   |   |   |                   |   |   |   | 2, 9, 13                           |          |
| Community  |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |
| 1. Support formation of mosquito net clubs   | 21     | A, BC          |                   | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x |   |                   |   |   |   | 2, 9, 14                           |          |
| 2. Support to child health days  | 6      | A BC           |                   |   |   |   | x                 |   | x |   | x                 |   | x |   | x                 |   | x |   |                   |   |   |   | 9                                  |          |
| 3. Promote and distribute condoms  | 50,000 | A              |                   | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 2, 3, 9                            | On-going |
| 4. Support to dipping and re-dipping of mosquito nets  | 4      | A, BC, Q       |                   |   | x |   | x                 |   | x |   | x                 |   | x |   |                   |   | x |   | x                 |   |   |   | 3, 9                               | On-going |
| 5. Establish links with private ITNs suppliers to access subsidized ITNs at sub-county level | 7      | A              |                   |   | x | x | x                 | x | x | x | x                 | x | x |   |                   |   |   |   |                   |   |   |   | 9                                  |          |
| 6. Establish rabbit breeding centers fish ponds to improve protein in-take                   | 5      | A, BC          |                   |   |   |   |                   |   | x | x | x                 | x | x | x |                   |   |   |   |                   |   |   |   | 9, 15                              |          |
| 7. Construct shallow well springs and water tanks to improve hygiene and sanitation          | 70     | A              |                   |   |   |   |                   |   | x | x | x                 | x | x | x |                   | x |   |   |                   |   |   |   | 3, 9, 23                           |          |

| Major Activities  | Target                | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status   |
|---|-----------------------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|----------|
|   |                       |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |          |
|   |                       |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |          |
| 8. Distribute ORS at community level  | 50,000                | A              |                   |   | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 2, 3, 9                            | On-going |
| 9. Strengthen immunization outreaches through joint planning with NDHS  | 10                    | A              |                   | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x |   |   | 2, 3, 9                            | On-going |
| Facility  |                       |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |
| 1. Advocate for improved IMCI essential drugs supplies at health facility level                                   | 10                    | A              |                   |   | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x |   |   | 9                                  |          |
| 2. Support to V CT and PMCT outreaches through awareness creation by referring mothers to health facilities       | VCT= 490<br>PMTCT=210 | A              |                   | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 9                                  |          |
| District  |                       |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |
| 1. Support national malaria days at the district level  | 3                     | BC             |                   |   |   |   |                   | x |   |   |                   | x |   |   |                   | x |   |   |                   |   |   |   | 9                                  |          |
| 2. Participate in the World AIDS day  | 5                     | BC             | x                 |   |   | x |                   |   | x |   |                   | x |   |   |                   | x |   |   |                   | x |   |   | 9                                  |          |
| Objective 4. Strengthen national (MOH) and district capacity to replicate and sustain the community IMCI approach |                       |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |
| Community   |                       |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |
| 1. Train CORPS in   | 900                   | Q, BC          |                   |   |   |   | x                 | x | x | x | x                 | x |   |   |                   |   |   |   |                   |   |   |   | 4, 9                               |          |

| Major Activities   | Target | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status        |  |
|--|--------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|---------------|--|
|  |        |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |               |  |
|  |        |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |               |  |
| CIMCI intervention areas, mobilization and communication skills  |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |               |  |
| 2. Orient community structures, rabbit raising, aquaculture and vegetable growing                            | 9      | Q, BC          |                   |   |   |   |                   |   | x | x | x                 | x | x | x | x                 |   |   |   |                   |   |   |   |                                    | 9, 13, 15, 16 |  |
| 3. Train and work with drama groups (2 per sub county) at community level and 1 school based per sub-county) | 21     | BC             |                   |   | x | x | x                 | x | x | x | x                 | x |   |   |                   |   |   |   |                   |   |   |   |                                    |               |  |
| 4. Train parish immunization mobilizers  | 84     | Q, BC          |                   |   |   |   |                   | x | x | x | x                 | x |   |   |                   |   |   |   |                   |   |   |   |                                    | 4, 9          |  |
| 5. Train CCAs in mobilization and communication skills for VCT and PMTCT services                            | 48     | Q, BC          |                   |   |   |   |                   | x | x | x | x                 | x | x |   |                   |   |   |   |                   |   |   |   |                                    | 4, 9, 17, 18  |  |
| 6. Train PDCs in CIMCI intervention areas, mobilization and communication skills                             | 100    | Q, BC          |                   |   |   |   |                   | x | x | x | x                 | x | x |   |                   |   |   |   |                   |   |   |   |                                    | 4, 9          |  |
| 7. Training TBAs in CIMCI intervention   | 150    | Q, BC          |                   |   |   |   |                   |   |   | x | x                 | x | x |   |                   |   |   |   |                   |   |   |   |                                    | 4, 9          |  |

| Major Activities   | Target | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status   |          |
|--|--------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|----------|----------|
|  |        |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |          |          |
|  |        |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |          |          |
| areas, mobilization and communication skills   |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |          |
| 8. Train water user committee members in water source maintenance and resource mobilization      | 100    | Q, BC          |                   |   |   |   |                   |   |   |   |                   | x | x | x |                   |   |   |   |                   |   |   |   |                                    | 9, 19    |          |
| 9. Train of CORPS (900) and PD’s (100) in data gathering, compilation, reporting and utilization | 1,000  | Q, BC          |                   |   |   |   |                   |   | x | x | x                 | x |   |   |                   |   |   |   |                   |   |   |   |                                    | 9        |          |
| Health Facility  |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |          |
| 1. Train health workers in CIMCI and interpersonal communication                                 | 60     | Q              |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    | 4, 9     |          |
| District   |        |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |          |
| 1. Sign MOH with Ntungamo District   | 1      |                |                   |   | x |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    | 6, 9, 24 | Achieved |
| 2. Training of trainers (TOT) for sub-county trainers  | 40     | Q              |                   |   |   | x |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    | 9        |          |
| 3. Build capacity of selected CBO at sub-county level to integrate CIMCI Plus                    | 7      | Q              |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | x                 | x | x | x |                                    | 9        |          |

| Major Activities   | Target  | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status   |
|--|---------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|----------|
|  |         |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |          |
|  |         |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |          |
| activities in their agenda   |         |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                                    |          |
| 4. Organize cooking demonstrations   | 21      | Q              |                   |   |   |   |                   |   |   |   | x                 |   | x |   | x                 |   | x |   | x                 |   |   |   | 9                                  |          |
| 5. Review and adapt the training materials   | 5       | Q              |                   |   |   | x |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | 4, 9, 26                           |          |
| 6. Prepare activity quarterly activity reports   | 15      | Q              | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 9                                  |          |
| 7. Prepare and compile activity annual reports   | 5       | Q              |                   |   |   | x |                   |   |   | x |                   |   |   | x |                   |   |   | x |                   |   |   | x | 9                                  |          |
| 8. Local partners and staff skills assessments   | 2       | Q              |                   |   |   |   |                   | x | x | x | x                 | x |   |   |                   |   |   |   |                   |   |   |   | 5, 9                               |          |
| 9. Bi-annual production of CIMCI-Plus News letters   | 8       | BC             |                   |   |   | x |                   | x |   | x |                   | x |   | x |                   | x |   | x |                   | x |   |   | 9                                  |          |
| 10. Headquarter support to production of project publications  | 5       | BC, Q          |                   |   |   | x |                   |   |   | x |                   | x |   |   |                   | x |   | x |                   | x |   |   | 5                                  |          |
| 11.<br>• HQ technical backstopping to the project<br>• Country Officer technical backstopping to the project | 5<br>10 | Q              | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 5, 6                               | On-going |

| Major Activities  | Target             | Activity Focus | Time Frame        |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   |   |   |   | Personnel <sup>1</sup> Responsible | Status   |
|---|--------------------|----------------|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|-------------------|---|---|---|------------------------------------|----------|
|   |                    |                | Year 1 by Quarter |   |   |   | Year 2 by Quarter |   |   |   | Year 3 by Quarter |   |   |   | Year 4 by Quarter |   |   |   | Year 5 by Quarter |   |   |   |                                    |          |
|   |                    |                | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 | 1                 | 2 | 3 | 4 |                                    |          |
| 12. Monthly staff planning and management meetings  | 40                 | Q              | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 9                                  |          |
| 13. Documentation of project experiences and lessons learned  |                    | BC, Q          | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | x                 | x | x | x | 9                                  | On-going |
| 14. Phase over and phase out planning meetings<br>• District<br>• Sub-county                                | 1<br>7             |                |                   |   |   |   |                   |   |   |   |                   |   |   |   |                   | x | x | x | x                 | x | x | x | 2, 4, 9                            |          |
| 15.. Project staff development through<br>• Short courses<br>• Workshops<br>• Meetings<br>• Exposure visits | 2<br>15<br>10<br>2 | Q, BC          |                   | x |   | x |                   |   | x |   |                   | x |   | x |                   | x |   | x |                   | x |   |   | 9, 20, 21, 25                      |          |



**ANNEX 3: REVISED KNOWLEDGE, PRACTICE, and COVERAGE SURVEY  
REPORT**

**Community-based Integrated Management of Childhood Illness (CIMCI)  
Plus Project in**

**Ntungamo District, Uganda**

**October 1, 2003 to September 30, 2008**

**Cooperative Agreement # FAO-A-00-99-00025-00 Modification No.02**

**Submitted by:**

**Jimrex BYAMUGISHA,  
Consultant**

**To:**

**Africare  
440 R Street, NW  
Washington, DC 20001**

**October 25, 2004**

|  |           |
|--|-----------|
| <b>EXECUTIVE SUMMARY .....</b>   | <b>4</b>  |
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## **EXECUTIVE SUMMARY**

### **Background information**

The 199 mothers of the children aged less than 2 years were interviewed

- The mothers were asked to indicate if they could read and write in their vernacular and 66.8% said they can read/write
- Majority (81.3%) were generally the primary school dropouts
- 89.1% said they were married, while the singles composed only 3.3%, divorced were 0.3%, separated 2.6% and widowed 4.6%.
- 84% said they had such economic activities that would give them personal income
- The activities that were mentioned were mainly selling of surplus agricultural products 67.1% and the handcraft, weaving and rugs 14%.
- It was found that 63% of the mothers interviewed did work away from home
- The mothers normally go with their children at places of work when they are working away from home (67.1%), other leave the children with their older siblings 23.7% while other with the relatives 16%.
- From the 199 households visited, it was found that 51% of them had only one child less than two years, 41.8% had two children and the rest (7.2%) had 3 children

### **Breast Feeding and Nutrition of Index Child**

- Among the children aged 0-5 months, they were all still breast feeding, while those age 6-11 months, majority (97.7%) were also still breast feeding. Interesting to note also is that the children aged 12-23 months, 70.8% were still breast-feeding
- 64.3% of the mothers interviewed said they breast fed the index child within the first one hour after delivery, while 23.1% said they took about 2-8 hours and 10.6% took more than 8 hours
- The most common foods eaten by index child in 24 hours prior to the survey were breast milk 74.9%, eggs 51.8%, Bushera 37.2%, Milk/yogurt 45.7%, and other mashed/soft food 32.7%.
- And 87.7% said the index child use different plates more so those who are still very young
- The younger index child tends to eat from separate plate as compared to the one who is somewhat old ( $X^2=10.693$ ,  $DF=2$   $P=0.005$ ). The intervention then needs to be properly guided taking care of the age of the child.
- 73% of mothers said add additional foods to child still breast feeding at 6 months, 12% said the earlier than 6 months of age is good enough while 10% said after 6 months.

### **Diarrhea Among the index Children**

- 31.2% of the index children had diarrhea two weeks prior the survey.
- Among the children who were still breast-feeding and had diarrhoea, 53.6% were breast-fed same as usual, 25% had reduction in the breastfeeding trends. In general, 64.3% of children still breast feeding were either breast fed more or same
- 53.7% of children with diarrhea received the same amount of fluids during the time of sickness like before the sickness, while 27.8% said they had received more than usual. In general, 81.5% of the children with diarrhea had received more or same amount of fluids

- 11.6% of children with diarrhea received more of foods than before while 48.8% had got just as usual. In general terms, 61.4% of children with diarrhea had received more or same solid/mashed food during their sickness.
- The mothers said 61.7% of the children with diarrhea had received treatment from home while 38.3% had had it from outside home
- Those who got treatment at home, 60.9% had got herbal treatment, 19.6% got anti-diarrhea/antibiotics treatment, ORS was only taken by 8.7% of the same children
- Those taken away from home, 53.9% taken to government health facilities or clinics 28.2% nearest drug shops and to hospitals 2.6% and private physicians 7.7%.
- The kind of treatment that the children with diarrhoea got from outside home was mainly anti-diarrhoea drugs or antibiotics, 44% and ORS 35%
- Only 4.9% of the interviewed mothers could describe the preparation of ORS correctly
- The most common way of getting diarrhea as perceived and mentioned by mothers were eating with unwashed hands 29.6%, eating cold food 25%, lack of latrine 9.6%, worms 19%.
- The most common times mentioned of when they wash hands were after latrine use 71.7%, when hands are dirty 68.8%, and before eating 49.8%.
- The majority of the homes of the mothers surveyed never had hand-washing facility with soap present near the latrine (96%)
- Common symptom that mothers normally look for in order to take their children with diarrhea to the health facility to seek treatment were mainly weakness or tiredness of children 54.3%, prolonged diarrhea 29%, dehydration 23% and to some extent fever 19% and vomiting 15%.
- In last 12 months prior the survey, 45.2% of index children had been taken for false tooth extraction.
- Majority of these children get the false tooth extraction when they are still very young i.e less than 2 months 64% or just before 6 months of age 26%.
- The practice of false tooth extraction was found to be very much influenced by the education of the mother 36% (Gamma =0.36). Actually a child whose mother could not read and write had almost double the risk of having false tooth extraction than a child whose mother could read and write (**Odds ratio =1.5**).

### **Immunization Levels Among Those Aged Less Than 24 Months**

- 58.8% of the children of interest had mothers who possessed their vaccination records.
- 22.1% said the given child received the BCG
- By looking at the 117 children who had the immunization cards, 93.2% had got DPT1, 85.5% got DPT2, while those that had got DPT3 were 75.2%.
- 63 children out of 117 (53.8%) who had the vaccination records had indicated that the child received the measles vaccine.
- 75.4% had tetanus injection as compared to those who have not yet 24.6%
- These were 36 in number that responded to the measles vaccine, 61% said they have been immunized against measles. Among those aged 9- 11 months, no one was vaccinated as yet.
- Among the 12-23 months old children, 74% of them had participated in the national immunization days, while among 6-11 months only 50% had participated, and yet another smaller proportion of 23% among the children aged 0-5 months had participated.

- 69% of mothers said they got injection during pregnancy to prevent the child from getting convulsions after birth, an anti-tetanus shot or an injection at the top of the shoulder.

### **Fever**

- The prevalence rate of fever among the children aged 0-23 months was standing at 29.8%,
- 66.7% of children with fever that were still breast-feeding were either breast-fed more or same during the time they had fever.
- 29.1% and 46.4% of children with fever were able to drink more than usual and same as usual respectively. In general, those who were able to drink as usual or more than usual were 75.5%
- 64% of children with fever ate more or same as usual during fever
- Out of 58 children that had fever, 48.3% had received treatment at home before going out to other places to seek treatment
- Home treatment was dominated by, traditional herbs 18.5 % and Chloroquine/qawaquine/maleraquine 59.3%. The proportion that received fansidar at home was only 3.7%.
- About 88.1% said they went outside home and sought treatment for their children.
- Those taken away from home went to drug shops 36.5%, or government health facility/clinic 32.7% and private physicians 17.3%.
- Outside home treatment ranged from Panadol/maxadol 57.5%, chloroquine /dawaquine/maleraquine 51.9%, Quinine 32.7% and Fansidar 19.2%
- Mothers said mosquito bites 88.4%, and drinking un boiled water 12% can cause malaria
- As a way of avoiding the malaria, suggestions given were clearing compound 23.4%, eliminating stagnant water 19.6%, using mosquito nets 22.1%, closing windows and doors early 24.9% and boiling drinking water 15.7%. However, 22.5% said there is nothing they can do to prevent malaria.
- 16% (32 households) of 199 households visited during the survey used at least a ITN the previous night prior survey
- In those 32 households that used the ITN, it was reported that the majority of household members (88%) that slept under the ITNs were children under five years, followed by mothers (54%), and husband (44%).
- However, out of 199 children under two years, only 28 children (14%) slept under ITNs
- About 53.6% had dipped the nets for children, of whom 33.3% had done it one month prior the survey
- From the data, 57% of the observed nets were in good state and were somewhat effective in protecting the children from mosquito bites
- 10.6% of the index children were taken for 'millet' extraction in 12 months prior the survey
- How pregnant mothers can be protected against malaria mentioned were; use of ITNs 46%, taking anti-malarial 38.4%, closing windows and doors early 20.2%
- About 41.7% of the mothers confessed that they never took the drugs during last pregnancy
- Common drug taken by the pregnant mothers was fansidar 84.5% and only 9.5% said they took chloroquine
- Anti malarial drugs were obtained from Health center III 49.6%, health center IV 15.7%, private clinics 11.3% and only 7.8% went to hospital

- Majority of the mothers said they got the drugs twice 65%, while 17% got the drugs only once and 14% got them thrice
- The majority mentioned that took the drugs at 4<sup>th</sup> month 61.1%, and 7<sup>th</sup> month 32.9%.
- Those who took the anti-malarial drug at 4<sup>th</sup> and 7<sup>th</sup> months were 11 out of 199 (5.5%) mothers.
- The visiting of the antenatal care services was very high among the mothers 93.7%

## **HIV/AIDS**

- 100% of mothers have ever heard of AIDS
- Main signs that mothers look up to are loss of weight 70.7%, skin rash 46.5%, persistent fever 13.6%, and diarrhea 16.7% and cough 27.8%.
- 93.4% think some one can avoid AIDS, while 2.6% said it is not possible to avoid it and 4.1% said they do not know
- Suggestions of avoiding AIDS were abstaining from sex 78.4%, use of condom 51.8% and limiting sex to one partner 31.2%
- 36.2% of mothers with children less than 24 months said a child could get HIV/AIDS from an HIV positive mother during pregnancy, at birth and during breastfeeding.
- Only 5.6% said have ever tested for the HIV/AIDS.
- Majority of the mothers said they can look after HIV/AIDS patients very well 89.4% and only 10.2% said they can not
- 55.1% said sick teachers should not be allowed to teach their children
- Their children playing with other children who have HIV/AIDS, most of the mothers said no to that 56.4%.

## **Care Seeking**

- 84.3% of mothers do consult at household level about the health of there children,
- About 84.6% said they do consult other people other than the members of the household about the health of the children while 15.4% do not
- The people consulted are neighbors 55%, mother in-laws 36.1%, medical doctors 6.5%, community health workers 10.1%, TBA 6.5%
- Cases where a child should be taken immediately when sick are fever 70.4%, child becoming sicker 38.7%, when not able to breast feed or drink 20.6%
- 90% had ever taken their children to health facility
- Most of the mothers waited up to 1 day 35.2%, though others just took the child straight away 17.9% and others waited up to two days 26.3% from time they new the child was sick up to the time the child was taken.
- The decision to take the sick child to health unit was made mainly by either the mother 47% or the father 43%
- Most mothers 87.7% mainly took the sick children to health unit
- 43.3% of the mothers said they were asked to take back children, and 80.3% were actually taken back, the rest 19.7% just stayed home
- Out of 5 mothers referred to the hospital with their children, 3 managed to go there (66.7%) while the other two failed to go there, reason being additional costs being an affordable
- Main deterrent from using the health facilities, were financial costs involved 65.5%.
- 61.5% were move a distance of less than 5 kms, while 30.4% move 5-10 kms and the rest 7.9% move for more than 10 kms



- 72.7% said these health workers have never visited the communities while 27% said they do visit sometimes while only 0.3% said they always visit

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## **CHAPTER ONE**

### **1.1 Introduction**

With funding from United States Agency for International Development (USAID) Africare implemented a four years (Oct 1999-Sept 2003) Community based Integrated Management of childhood Illnesses (CIMCI) project in the eight Sub-counties of Ntungamo District. After successful implementation, the project was extended to cover the seven Sub-counties that had not been covered which include: Nyakyera, Ruhaama, Rugarama, Ihunga, Kayonza, Itojo and Bwongyera.

As one of USAID funding requirements, Child Survival projects must conduct the Baseline Survey before the implementation to use it as a benchmark upon which to measure performance. It is against this background that the survey was conducted between January 20-25, 2004 to inform the project of where the Sub-counties were in terms of Knowledge, Practice and coverage (KPC) of the behaviours related to child and maternal health and to enable the project develop the appropriate interventions and messages to address the problems in the communities.

### **1.2 Goal of CIMCI plus**

By the end of 2008, Africare and MOH will have reduced morbidity and mortality of children under five and have improved the health status of women of reproductive age in the 15 sub-counties of Ntungamo District of Uganda.

### **1.3 General Objectives**

1. To promote the knowledge and behaviours related to the prevention of childhood illnesses, at the household and Community levels.
2. To improve the home management of the sick child by promoting timely and appropriate care seeking at the household and community levels.
3. To improve the accessibility of the under five children and women of reproductive age to quality health services and products both at the facility and community levels.
4. To strengthen the national and the district MOH capacity to replicate and sustain the community IMCI approach.

### **1.4 Baseline Survey Methodology and Planning**

#### **1.4.1 KPC Questionnaire development**

The Monitoring and Evaluation officer Started on the questionnaire development in Mid December 2003. The focus was on the five intervention areas, which included: Malaria (35% effort), Immunisation (25% effort), HIV/AIDS (15% effort), Nutrition, Micronutrients and breastfeeding (15% effort) and CDD (10% effort). In the development of the questionnaire, the five intervention areas were addressed as well as Care seeking section. The additional questions to the CIMCI phase 1 Final Evaluation Questionnaire were derived from:

- a). KPC 2000+ ([www.childsurvival.com/kpc2000/kpc2000.cfm](http://www.childsurvival.com/kpc2000/kpc2000.cfm))
- b) 2001-2005 Government of Uganda-UNICEF Country Programme-Household and Community- Based Practices Survey Questionnaire

*c) Uganda Malaria Partnership Program (UMPP) 2003-2006 -Baseline Survey on the performance of Behaviour Change Communication Intervention on Malaria Prevention and Treatment.*

### **1.5 Sections of the Questionnaire and Changes/Modifications Made**

As already mentioned, the CIMCI plus questionnaire was a modification of the Phase 1 Final Evaluation. The following were the modifications done.

| Section                                 | Modification   | Comments.  |
|---|--|--|
| Cover Page                              | 1-Provision of where the KPC Manager had to sign and approve.  | The Supervisors had to make sure that they did a thorough check of the questionnaires before submission to the KPC Manager. Double-checking minimised mistakes.  |
| Background Information (Qn1-9)          | 1-A question on the marital status of the Mothers was added.   | The type of the family can influence sometimes- childcare practices e.g. single mother, widowed, divorced etc.   |
| Breast feeding and Nutrition (Qn 10-18) | 1-Qn 15 response 1&2 were specified for above 18 years other than the maid & below 18 years respectively.<br>2-Qn 17-addition of response 4 –above six months.   | Wanted to specify the adult since the maid could also be an adult.<br>Wanted to cater for that response since in questionnaire pre-testing mothers mentioned it a lot.   |
| Diarrhoeal Diseases (Qn19-34)           | 1-Qn27 was revised to read.....and you would like to prepare ORS solution for him/her, what steps would you follow?<br>2-Qn 28 was revised to BHow does one get Diarrhoea?<br>3-added response 3 –Don't know<br>4.Since July...was removed on Qn33 | During the final Evaluation, it was observed that mothers did not understand the two question and others gave the response of don't know but was not provided for.<br>-Since July...was deleted because the Question was intended to get data on the practice. |
| Immunization (Qn 35-45)                 | 1-This was a new section that was added. ARI section was removed.<br>2-The questions were revised e.g. BCG scar-inspect the right shoulder<br>DPT-left thigh and not buttocks<br>Measles-left thigh not arm  | -This was in relation to the local practice on the immunisation sites.<br>-Questions were got from Rapid KPC Module 4A   |
| Fever (Qn46-74)                         | 1- Qns on millet extraction were added.<br>2-Qn s 69-74 were added to capture IPT and Antenatal<br>3. Qn73 Antenatal replaced Prenatal.<br>4. Qn74. Responses 7-10 were deleted  | 1-Done to address the issues of cross cutting signs and symptoms of ARI & Fever.<br>2-New interventions in the CIMCI plus<br>3-Corrected<br>4-Were not relevant  |
| HIV/AIDS (Qn 75-88)                     | 1- Qns 80-88 on VCT, Stigma and discrimination were added  | This was as proposed. Questions were extracted from rapid KPC module 7   |

**NB.** The questionnaire was reviewed with technical guidance from the Health Program manager-Africare Washington, the Statistician, and the Program Co-ordinator.

## **1.6 Sampling method for the Survey clusters**

The WHO /EPI 30 cluster sampling method was used. The population and the number of Households were obtained from the 2002 Uganda population and Housing Census. 300 mothers with children under five years were interviewed. One index child was considered i.e youngest child that was below 2 years.

## **1.7 Training of Enumerators**

The training took place from Jan20-22, 2004 at ROSEMA Hotel in Rubaare Sub-county. The objective of the training was to help the enumerators conceptualise the questionnaire and get basic interviewing skills as well as their roles and responsibilities in the survey. A total of 14 Enumerators (most of whom had participated in two or three of the Ntungamo CIMCI surveys and from Health Department) and 2 supervisors were trained (a copy attached). The training was facilitated by the Program Co-ordinator, M&E Officer, BCCS and the two Supervisors. The PC summarised the need for the Baseline survey as a need to know:

- a) Where are we?
- b) Where do we want to go?
- c) How do we reach there?

The detailed training program is attached.

The Deputy DDHS who urged enumerators to get a proper and sincere baseline from where to judge the District closed the training. He remarked thus: *A this activity should not be looked at as an Africare business. It is only complementing the Districts efforts and helping you Health workers to realise the District Health sector objectives in preventive health*

## **1.7 Data Collection**

Data collection took three days from January 22-25, 2004.

During the three days of fieldwork, Enumerators used the KPC questionnaire to collect quantitative data in the CIMCI Plus seven Sub-counties. Four vehicles were used i.e 3 Africare Double cabin Pick ups and 1 Land rover from the District. The team was divided into two groups each with two vehicles and one supervisor. The two groups further divided themselves into two sub-groups containing 3 or 4 enumerators to cover different clusters within the Sub-county. Each enumerator administered seven questionnaires on average daily. Each supervisor ensured that he visited each enumerator once a day to ensure that he/she was on track. The M&E provided the overall support supervision to both groups.

## **1.8 Quality Control**

The following were put in place for quality control

- a) The project identified **a statistician** who had participated in the CIMCI phase 1 Midterm and final Evaluation Surveys. The Health Program Manager Africare-Washington, the PC, the M&E, the Statistician participated in the development and

cleaning of the Questionnaire. This enabled him to get more insights of the whole Survey before Data entry and analysis was done.

**b) Training and fieldwork were residential.**

This gave more time to enumerators to pass through the questionnaire several times. Role-plays in the late evenings were done and this enabled them gain more experience and confidence in administering the questionnaire. Besides, it also gave supervisors and the M&E ample time to review the questionnaires after fieldwork.

**c) Translation and piloting the questionnaire.**

Questions that were written in English were translated in Runyankore with every enumerator participating during the training. The questionnaire was piloted outside the 30 clusters. The Enumerators were paired and one interviewed while the other looked and made comments and vice versa. The objective of pairing them was to know each and every ones weaker areas and try to correct them before the fieldwork. After the pilot, there was sharing of field experiences and correction or re- interpretation of questions.

## **1.9 Data management and analysis**

This section explains the methodology applied from the time the questionnaires were from field up to report writing.

**a). Data coding**

Four research assistants, who were oriented through questionnaire and given ideas on what was expected, coded the filled questionnaires. The same four people under a close supervision of the consultant did the work. They did the work from a common place to ease the making of accurate code sheet. At this stage, some data collection errors were identified and corrected while others were marked not for entry into the computer.

**b). Data entry**

A data entry screen was customarily made in EPINFO by the consultant who also made its customized check program. These two aspects helped minimise the data entry errors. The work of data entry was done by five data entrants who also had to do it from a common place under close supervision of the consultant.

**c). Data cleaning**

Each data entrant cleaned the records he/she entered using the machine, and after merging of the datasets, the consultant did final cleaning before doing data analysis. Logical issues as well as consistency of the data were among key issues investigated at this stage. This was done in EPINFO.

**d). Data analysis**

The cleaned database was then exported to SPSS/PC+ for data analysis. The analysis was done following the analysis framework that the consultant made and submitted to the client. The analysis was done at two levels, namely the descriptive and policy focused. The chapter of the findings shows the tables and charts that summarise the data in descriptive manner (showing frequency distributions in percentages and numbers, and averages, minimum, maximum and mode) and also statistical tests that have been explained for easy following. Some of the data was transferred to MS Excel to help draw some charts as seen in the report. The results are not weighted since population of farmers was not available.

**e). Report writing and presentation**

The consultant was able to use a mix of software in writing the report including the MS-Word and Ms-Excel. The report has two sections i.e. the executive summary and the findings. The chapter on findings is presented as per major sections as indicated in the questionnaire.

The report has been presented to the client both as a hard copy and soft copy. Included in a packet submitted to the client is the dataset both EPINFO version, and SPSS Version. The data dictionary is included in the SPSS version dataset. The data capture screen and the check program are also submitted in the softcopy form.

**1.10 Constraint during the survey**

The major constraint was failure to find mothers at home since it was millet-harvesting season. This made the groups finish clusters late in the night because they utilised evening times to reach most mothers. The opportunity of holding the survey on Sunday was also utilised as most mothers were drying the millet and did not go to Churches.

## CHAPTER TWO

### 2.0 INTRODUCTION

The findings of this study have been grouped into the following major sections:

**Background information**, which describes the mothers interviewed and the some characteristics of the households' composition like the number of children present who are under five years.

This is followed by the section on **breastfeeding and nutrition** of children covering both knowledge and practice components. A section on **Diarrheal diseases**, which covers prevalence, practices and knowledge, is followed by a section on immunisation which in turn is followed by a section on **Fever** and then another on **HIV/AIDS**.

Other section in the report is on care seeking practices.

### 2.1: BACKGROUND INFORMATION ON MOTHERS OF THE CHILDREN AGED 0-23 MONTHS

#### 2.1.1 Age of the mothers

The mothers of the children aged less than 2 years that were interviewed in total they were 199, and only one never indicated her age. Those who indicated were mainly aged 25 to 34 years as shown in the table 1.1 below.

Table 1.1 Age distribution of the mothers interviewed

| Age of mothers | No  | %     |
|----------------|-----|-------|
| 18-24 years    | 82  | 41.4  |
| 25-34 years    | 95  | 48.0  |
| 35-44 years    | 21  | 10.6  |
| Total          | 198 | 100.0 |

The youngest of them was aged 18 years, and the oldest was 43 years with the average age of 26.5 years.

#### 2.1.2 Ability of mothers to read and write in vernacular.

The mothers were asked to indicate if they could read and write in their vernacular and 66.8% said they can read/write. The 33.2% who said they can't read/write are not a small proportion, and so in planning communication strategies, they cannot be ignored. The ability to read and write was not influenced by the age of the mother, since those who could read were 26.7 years as well as those who could not read were 26.1 years on average.

Table 1.2 Ability to read/write in vernacular

| Read/write status | No  | %     |
|-------------------|-----|-------|
| Can read/write    | 133 | 66.8  |
| Can read/write    | 66  | 33.2  |
| Total             | 199 | 100.0 |

Those who said they could read/write, were mainly upper primary dropouts i.e p5-p7, 55.2 % and generally the primary dropouts composed 81.3%. The details are well indicated in the table 1.3 below.

Table 1.3 Level of education of mothers

| Level of education | No | %    |
|--------------------|----|------|
| P1-P4              | 35 | 26.1 |



|          |     |       |
|----------|-----|-------|
| P5-P7    | 74  | 55.2  |
| S1-S4    | 20  | 14.9  |
| S5-S6    | 2   | 1.5   |
| Tertiary | 3   | 2.2   |
| Total    | 134 | 100.0 |

### 2.1.3 Marital status of the mothers

Mothers were asked to indicate their then marital status, and 92.5% said they were married, while the singles composed only 4.0%, divorced were 2.0%, and widowed 1.5%. The marital status is very important because it directs a number of issues that affects the life style of the home.

### 2.1.4 Economic activities of mother

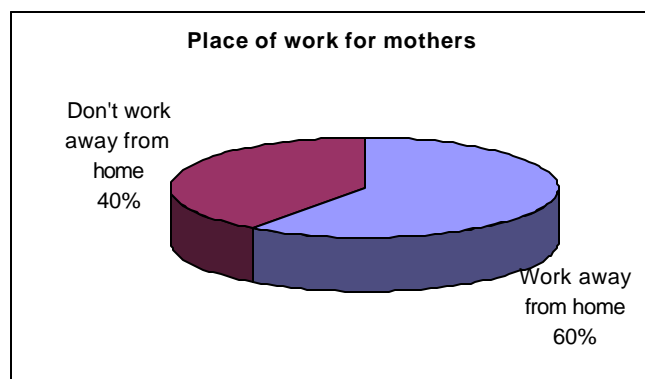
Mothers were again asked to indicate if they were having any income generating activities they were involved in that could generate money for their own personal use. The majority of the mothers (about 8 in every ten) 82.4% said they had such activities. The activities that were mentioned were mainly selling of surplus agricultural products 67.1% and the handcraft, weaving and rugs 14%. The other activities mentioned were growing crops specifically for sale 8.5% and shop operations 3.1%. The rest were doing other businesses

Table 1.4 Economic activities done by mothers

| Economic activities done by mothers   | No  | %     |
|---------------------------------------|-----|-------|
| Handcraft, weaving, rugs              | 23  | 14.0  |
| Growing crops for sale                | 14  | 8.5   |
| Selling surplus agricultural products | 110 | 67.1  |
| Shopkeeper                            | 5   | 3.1   |
| Street vendor                         | 2   | 1.2   |
| Salaried work                         | 3   | 1.8   |
| Animal keeping                        | 2   | 1.2   |
| Others                                | 6   | 3.1   |
| Total                                 | 164 | 100.0 |

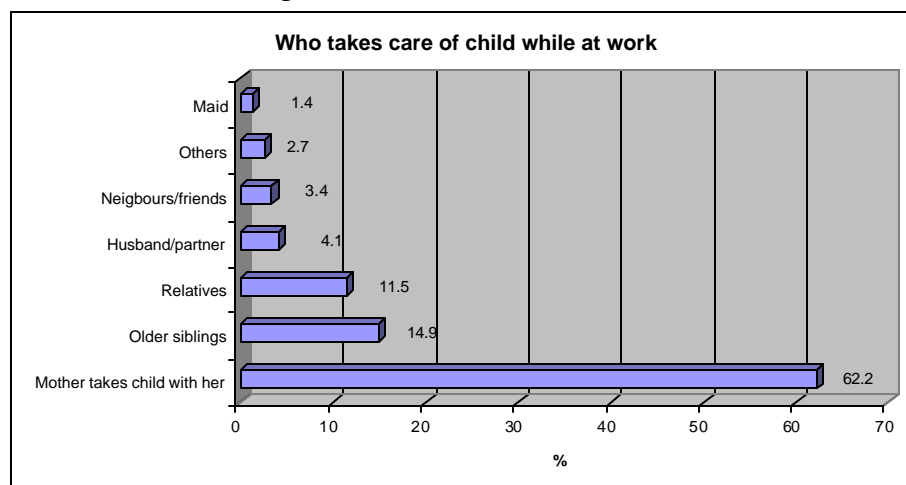
### 2.1.5 Care for children while the mother is away for work

The other aspect that was investigated about the mothers was whether they go away from home to work or not and if yes, who then takes care of the children. It was found that 60% of the mothers interviewed did work away from home. This is a good proportion and while away, they



said some people take care of the children.

The mothers disclosed that they normally go with their children at places of work when they are working away from home (62.2%). However, some mothers leave the children with their older siblings 14% while other with the relatives 11.5%. A very small proportion of the mothers leave the children with their spouses 4%.



### 2.1.6 Background information about the Children under two years of age.

The sampled households were asked to indicate the total number of children in their households that were under 2 years and give the details of their names sex and age.

From the 199 households visited, it was found that 50.5% of them had only one child less than one year, 49.5% had children aged 1 to 2 years.

A total of 199 children aged below 2 years were found in the 199 households, however, the analysis centered only on the youngest child in the household that was below two years of age (199 in number). Looking at their age distributions of index child, the ages were categorized as those below 6 months 30.2%, 6 to 11 months 21.6%, and 12 to 23 months they were 48.2%. The distribution of the index children by age and sex is shown in the table 1.5 below, and shows that most of them are aged 12-23 months 48.2%. The male/female distribution was almost uniform as shown.

**Table 1.5 Distribution of the index children by age and sex**

| Index child age category | Sex of index child |          | Overall % |
|--------------------------|--------------------|----------|-----------|
|                          | Male %             | Female % |           |
| 0-5 months               | 26.5               | 33.7     | 30.2      |
| 6-11 months              | 26.5               | 16.8     | 21.6      |
| 12-23 months             | 46.9               | 49.5     | 48.2      |
| Total                    | 98                 | 101      | 199       |

## 2.2 Breast Feeding and Nutrition of Index Child

As a methodological fact, the index children in the household whose information was captured were the youngest children in that household aged below 2 years. This meant that in the 199 households surveyed, details were got and analyzed only for 199 children under two.

### 2.2.1 Age at which mothers stopped breast feeding the index child

**Table 2.1 The age in months of child when mothers stopped breast feeding index child**

|              | At what age stopped breast feeding |             |              |       |
|--------------|------------------------------------|-------------|--------------|-------|
|              | Still                              | 7-12 months | 12-23 months | Total |
| 0-5 months   | 100.0                              | 0.0         | 0.0          | 60    |
| 6-11 months  | 97.7                               | 2.3         | 0.0          | 43    |
| 12-23 months | 70.8                               | 4.2         | 25.0         | 96    |
| Overall %    | 85.4                               | 2.5         | 12.1         | 199   |

Among the children aged 0-5 months, they were all still breast feeding, while those age 6-11 months, majority (97.7%) were also still breast feeding. Interesting to note also is that the children aged 12-23 months, 70.8% were still breast-feeding.

Apart from those who were breastfeeding among those aged 12-23 months, 25% said they stopped breastfeeding at an age of 12-23 months.

### 2.2.2 Time taken to breast feed the child after delivery

64.3% of the mothers interviewed said they breast fed their children within the first one hour after delivery, while 23.1% said they took about 2-8 hours and 10.6% took more than 8 hours. The trend did not change with the age of the child.

**Table 2.2 Time the mother breastfed the child after delivery**

|              | Time taken to breast feed a child after delivery |           |          |                | Total |
|--------------|--|-----------|----------|----------------|-------|
|              | Within one hour                                  | 2-8 hours | 8+ hours | Don't remember |       |
| 0-5 months   | 60.0   | 28.3      | 11.7     | 0.0            | 60    |
| 6-11 months  | 74.4   | 18.6      | 4.7      | 2.3            | 43    |
| 12-23 months | 62.5   | 21.9      | 12.5     | 3.1            | 96    |
| Overall      | 64.3   | 23.1      | 10.6     | 2.0            | 199   |

### 2.2.3 Eating habits of children

#### a. Types of food eaten in the last 24 hours prior the survey

The mothers were required to make a 24-hour recall of what the index child ate, and this is summarized in the table below. The most common foods eaten by children in 24 hours prior the survey were, eggs 51.8%, Bushera 37.2%, Milk/yogurt 45.7%, breast milk 74.9%, and other mashed/soft food 32.7%. Other foods eaten as indicated in the table are leafy green vegetables 13.6%, carrots/mangos/pawpaws 13.6%. Only a small proportion of children ate meat/fish 3.5%.

**Table 2.3 Type of food the index child ate 24 hours prior the survey**

| Category label             | Freq | %    |
|----------------------------|------|------|
| Breast milk                | 149  | 74.9 |
| Eggs                       | 103  | 51.8 |
| Milk/yogurt                | 91   | 45.7 |
| Bushera                    | 74   | 37.2 |
| Mashed/soft food           | 65   | 32.7 |
| Grains foods               | 45   | 22.6 |
| Leafy green vegetables     | 27   | 13.6 |
| Water                      | 14   | 7.0  |
| Carrots, mangos or pawpaws | 12   | 6.0  |
| Fruit or juice             | 11   | 5.5  |

|                  |     |       |
|------------------|-----|-------|
| Fat/oils/eshabwe | 9   | 4.5   |
| Meat/fish        | 7   | 3.5   |
| Powdered         | 1   | 0.5   |
| Honey/sugar      | 1   | 0.5   |
| Total            | 199 | 100.0 |

Those children that took vitamin A rich foods in 24 hours prior the survey were 92%, leaving only 8% of those children having not taken the vitamin A rich foods. Among the children aged 12-23 months, 89.6% took Vitamin A rich foods as shown in the table.

**Table 2.3B Taking of Vitamin A rich foods**

| Age of child | Took vitamin A |      | Didn't take Vitamin A |      | Total |
|--------------|----------------|------|-----------------------|------|-------|
|              | No             | %    | No                    | %    |       |
| 0-5 months   | 55             | 91.7 | 5                     | 8.3  | 60    |
| 6-11 months  | 42             | 97.7 | 1                     | 2.3  | 43    |
| 12-23 months | 86             | 89.6 | 10                    | 10.4 | 96    |
| Total        | 183            | 92.0 | 16                    | 8.0  | 199   |

When mothers were asked what their children ate in the last 24 hours, some just gave nothing else other than breast milk, and they had indicated that their children are still breast fed. With this in mind, it was assumed that such children are exclusively breast-fed. The analysis in this table is presented by age of the child, and 76.7% of the under 6 months were exclusively breast fed, while 22.65 of those aged 6-11 months were exclusively breast fed as shown in the table.

**Table 2.3b Children that were exclusively breast fed by age of the child**

| Age of child | Exclusive breast feeding |      | None exclusive breast feeding |      | Total |
|--------------|--------------------------|------|-------------------------------|------|-------|
|              | No                       | %    | No                            | %    |       |
| 0-5 months   | 46                       | 76.7 | 14                            | 23.3 | 60    |
| 6-11 months  | 5                        | 22.6 | 38                            | 88.4 | 43    |
| 12-23 months | 0                        | 0    | 96                            | 100  | 96    |
| Total        | 51                       | 25.6 | 148                           | 74.4 | 199   |

#### **b. Eating from separate plate**

Mothers were also asked to indicate if the children were using a separate plate to have their meals from the rest of the members of household. And 80% said the index child use different plates more so those who are still very young.

**Table 2.4 Use of separate plates by index child**

| Age of child | Use a separate plate |      | Total |
|--------------|----------------------|------|-------|
|              | Yes                  | No   |       |
| 0-5 months   | 100.0                | 0.0  | 3     |
| 6-11 months  | 71.0                 | 29.0 | 31    |
| 12-23 months | 92.7                 | 7.3  | 96    |
| Total        | 87.7                 | 12.3 | 130   |

The association that takes place between the eating from a separate plate and age of the child was significant ( $\chi^2=10.693$ ,  $DF=2$   $P=0.005$ ). The young children tend to eat from separate plates as compared to those who are somewhat old. The intervention then needs to be properly guided taking care of the age of the child.

For the children that share plates with others, the mothers were asked to indicate whom the children share with. The majority of the children shared with older people i.e adults though 18.8% said they share with other children.

**Table 2.5 The people that index child shares with the plate while eating**

|              | Whom child shares with the plate |        | Total |
|--------------|----------------------------------|--------|-------|
|              | Other children                   | Adults |       |
| 6-11 months  | 0.0                              | 100.0  | 9     |
| 12-23 months | 42.9                             | 57.1   | 7     |
| Total        | 18.8                             | 81.3   | 16    |

### c. Who serves the children

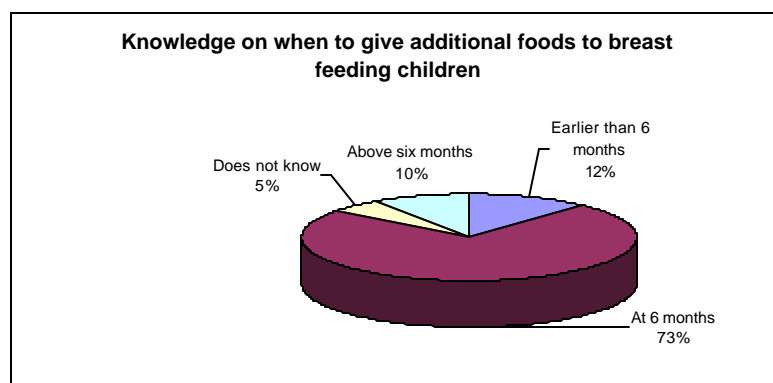
Adult members of the household (86.0%) mainly served the children under study (index child), while their mothers strictly served 12.5%. This is well demonstrated in the table below. It should be noted that some respondents never answered this question.

**Table 2.6 The person that serves the index child food in a home**

|              | Who serves the child |                |        |        | Total |
|--------------|----------------------|----------------|--------|--------|-------|
|              | Adults               | Other children | Mother | Others |       |
| 0-5 months   | 100.0                | 0.0            | 0.0    | 0.0    | 4     |
| 6-11 months  | 90.6                 | 0.0            | 9.4    | 0.0    | 32    |
| 12-23 months | 84.0                 | 1.0            | 14.0   | 1.0    | 100   |
| Overall      | 86.0                 | 0.7            | 12.5   | 0.7    | 136   |

## 2.2.4 Knowledge of improving nourishment of children

### a. Knowledge of mothers about when to introduce additional foods to a breast feeding child



As a way of testing the knowledge of when a child still breastfeeding should have additional foods given, 73% said at 6 months. However about 1 in every ten (12%) said the earlier than 6 months of age is good enough while 9.5% said after 6 months. 5% were very open and they said they do not know.

## 2.3 Diarrhea Among the Children

### 2.3.1 Prevalence of diarrhea among the index children

Mothers were asked whether the index child had diarrhea in the last two weeks prior the survey, and generally 31.2% of the index children had it in the specified time period. The prevalence associated with the age of the index child ( $X^2 = 8.39$ ,  $DF = 2$ ,  $P = 0.015$ ), for example, among the children aged 6-11 months it was as high as 48.8%, while among the 12- 23 months aged

children it was a bit low (28.1%). This may require that the sensitization of the communities may need to advise the mothers in relation to the age of the child and make them less vulnerable.

**Table 3.1 Prevalence of diarrhoea**

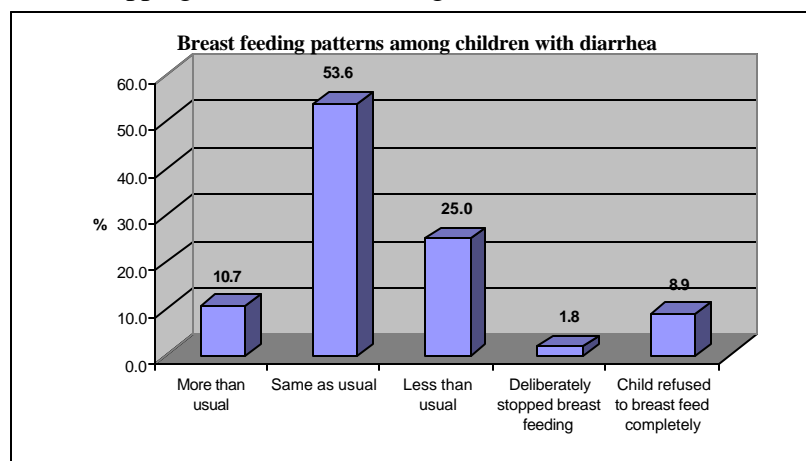
|              | Had diarrhea |      | Total |
|--------------|--------------|------|-------|
|              | Yes          | No   |       |
| 0-5 months   | 23.3         | 76.7 | 60    |
| 6-11 months  | 48.8         | 51.2 | 43    |
| 12-23 months | 28.1         | 71.9 | 96    |
| Overall      | 31.2         | 68.8 | 199   |

### 2.3.2 Feeding habits of children with diarrhoea

This section looked at the children still breast feeding, those who had started eating and drinking. The analysis is therefore focused on the three areas, the breast feeding experience, the eating of solid/smashed food and drinking.

#### a) Breast feeding practices of children with diarrhoea

Among the children who were still breast-feeding and had diarrhoea, were mainly breast-fed same as usual 53.6%. Those children that were indicated as having had a reduction in the breastfeeding trends were 25.0%. In general, 64.3% of children still breastfeeding were either breastfed more or same, while the rest had a reduction or complete stop, which was either by the mother stopping, or the child refusing.



#### b). Giving of fluids

Well knowing of the effect of the diarrhea, the study wanted also to establish the practice of mothers in giving of fluids to children who had it. In general terms, 53.7% were said to have received the same amount of fluids during the time of sickness like before the sickness, while 27.8% said they had received more than usual.

Those who received less than usual were only 18.5%. In general terms, 81.5% of the children with diarrhea had received more or same amount of fluids.

**Table 3.2 Provision of fluids to an index child with diarrhoea**

|             | Provision of fluids |               |                 | Total |
|-------------|---------------------|---------------|-----------------|-------|
|             | More than usual     | Same as usual | Less than usual |       |
| 0-5 months  | 0.0                 | 83.3          | 16.7            | 6     |
| 6-11 months | 38.1                | 47.6          | 14.3            | 21    |

|              |      |      |      |    |
|--------------|------|------|------|----|
| 12-23 months | 25.9 | 51.9 | 22.2 | 27 |
| Overall      | 27.8 | 53.7 | 18.5 | 54 |

### c). Giving of solid/mashed foods

Notice that the base of the children that had diarrhea is changing for the different tables, and this is because some children had not started taking either fluids and or foods because of age. However, of those that had diarrhea and were already taking some foods, 11.6% were said to have received more of such foods than before while 48.8% had got just as usual. In general terms, one can say that 61.4% of children with diarrhea had received more or same solid/mashed food during their sickness.

**Table 3.3 Provision of solid/smashed foods to an index child with diarrhoea**

|              | Provision of solid/smashed foods |               |                 | Total |
|--------------|----------------------------------|---------------|-----------------|-------|
|              | More than usual                  | Same as usual | Less than usual | Total |
| 0-5 months   | 0.0                              | 100.0         | 0.0             | 1     |
| 6-11 months  | 13.3                             | 40.0          | 46.7            | 15    |
| 12-23 months | 11.1                             | 51.9          | 37.0            | 27    |
| Overall      | 11.6                             | 48.8          | 39.5            | 43    |

### 2.3.3 Treatment of children with diarrhoea

The mothers were asked to indicate where they got the treatment for their children, and the kind of treatment they got either from home or health unit.

#### a). Place of treatment

The mothers said 61.7% of the children with diarrhea had received treatment from home while 38.3% had had it from outside home.

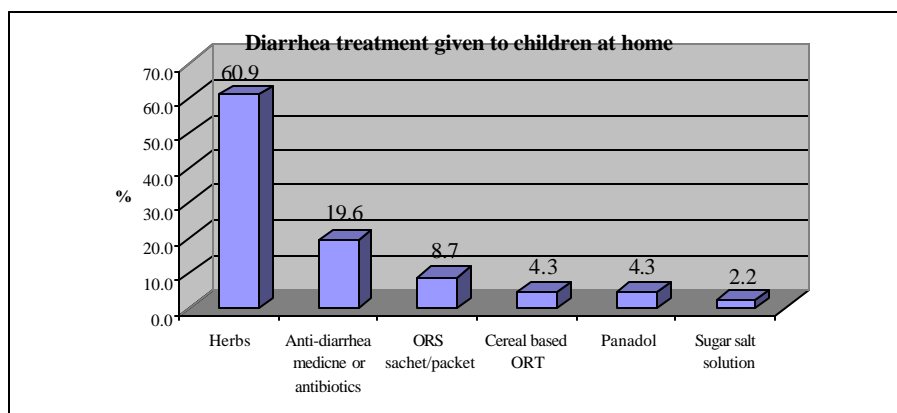
This place of treatment did not significantly be associated with the age of the child.

**Table 3.4 Where the index child with diarrhoea got treatment**

|              | Where got treatment |              | Total |
|--------------|---------------------|--------------|-------|
|              | At home             | Outside home |       |
| 0-5 months   | 83.3                | 16.7         | 12    |
| 6-11 months  | 52.4                | 47.6         | 21    |
| 12-23 months | 59.3                | 40.7         | 27    |
| Overall      | 61.7                | 38.3         | 60    |

#### b). Treatment at home

The nature of treatment was very import aspect for the children that had diarrhea, which they got at home. The interesting bit of this is that of the 46 children with diarrhea who received treatment from home, 60.9% had got herbal treatment. And 19.6% got anti-diarrhea/antibiotics treatment. ORS was only taken by 8.7% of the children of interest.

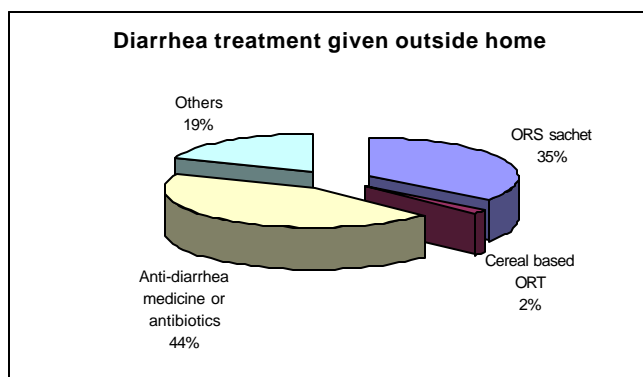


The children, who were taken from home, they were mainly taken to government health facilities or clinics 53.9%. Others were taken to the nearest drug shops 28.2% while those taken to hospitals were just a small proportion 2.6%. The private physicians were only visited by 7.7% of the sick children with diarrhea.

**Table 3.4 Where else the child with diarrhoea was taken for treatment other than home**

| Where child was taken             | No | %     |
|-----------------------------------|----|-------|
| Government health facility/clinic | 21 | 53.9  |
| Drug shop                         | 11 | 28.2  |
| Private physician                 | 3  | 7.7   |
| Government hospital               | 1  | 2.6   |
| Relative, friend or elder         | 1  | 2.6   |
| Others                            | 2  | 5.1   |
| Total                             | 39 | 100.0 |

The kind of treatment that the children with diarrhoea got when taken outside the home was mainly anti-diarrhoea drugs or antibiotics, 44.4% and ORS 35.2%. This is well indicated in the figure below.



The data indicated that the place where the child is taken has great influence over what the child is given in the long run ( $X^2=57.63$ ,  $DF=12$   $P=0.0000$ ). This is explained in the table below

**Table 3.5 The nature of treatment given outside home**

|  | Treatment outside home | Total |
|--|------------------------|-------|
|--|------------------------|-------|



|   | ORS  | Anti-diarrhea<br>medicine or<br>antibiotics | Others |    |
|---|------|---|--------|----|
| Government health facility<br>clinic/hospital | 64.6 | 36.4  | 0.0    | 23 |
| Private physician                             | 33.3 | 0.0   | 66.7   | 3  |
| Drug shop                                     | 36.4 | 54.6  | 9.1    | 11 |
| Overall                                       | 54.1 | 37.8  | 8.1    | 37 |

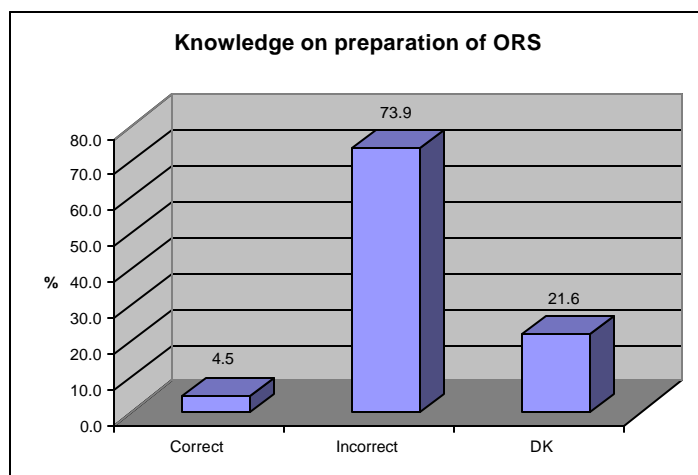
Looking at the information in the table above, children taken to hospitals are given ORS, and the same thing happens with those taken to government health facility/clinic. Taking the private physician as an example, majority of the children is given anti-biotic.

This may imply that the project needs to advise the mothers where to go in case the child gets diarrhea since this affects what children are given.

### 2.3.4 Knowledge about diarrhea case management

#### a) Preparation of ORS

One of the areas of managing diarrhea cases is the preparation and administration of ORS. Mothers were asked to describe the steps taken to prepare the ORS for child with diarrhea, and those who said all the steps correctly were only 9 out of 199 mothers interviewed. This made only 4.5% of the entire sample size, which is a rather very small proportion. The ones considered not knowing were those who tried and failed and those who could not try any single step by saying they just do not know. This is well demonstrated in the chart below.



As noted from the results, it is obvious that this is general ignorance which is not influenced by whether the mother is educated or not, young or old, rich or poor. It should be tackled massively knowing that mothers just fall in the same trap. The major issue that brought this most likely was the washing of hands as something major.

#### b). Knowledge on how diarrhea spreads and how to avoid it

Mothers were also asked about how one can get diarrhea, and they gave a number of varying responses as shown in the table below.

The most common ways of getting diarrhea as perceived and mentioned by mothers were eating with unwashed hands 29.6%, eating cold food 25%, lack of latrine 19.6%, worms 19% and drinking un-boiled water 11%. Other issues mentioned are listed in the table below.

**Table 3.6 The perceived ways through which one can get diarrhea**

| Perceived Ways through which one can get diarrhea | No (n =199) | %    |
|---|-------------|------|
| Eating with dirty/unwashed hands                  | 59          | 29.6 |
| Eating cold food                                  | 50          | 25.1 |
| DK  | 45          | 22.6 |
| Lack of latrine                                   | 39          | 19.6 |
| Worms   | 38          | 19.1 |
| Drink un-boiled water                             | 22          | 11.1 |
| Serving food with dirty/unwashed hands            | 21          | 10.6 |
| Eating unwashed fruits                            | 18          | 9.0  |
| Unwashed food utensils                            | 10          | 5.0  |
| Poor nutrition                                    | 9           | 4.5  |
| Eating unwanted food                              | 6           | 3.0  |
| Other diseases                                    | 6           | 3.0  |
| Others  | 6           | 3.0  |
| Eating contaminated food                          | 3           | 1.5  |
| Uncovered food                                    | 3           | 1.5  |
| Poor home sanitation and hygiene                  | 3           | 1.5  |
| High temperatures                                 | 3           | 1.5  |
| Change of food                                    | 3           | 1.5  |
| When developing teeth                             | 3           | 1.5  |
| Flies   | 3           | 1.5  |
| Helmethics  | 2           | 1.0  |
| Breast milk                                       | 2           | 1.0  |
| Eating soil                                       | 2           | 1.0  |
| Comes on its own                                  | 1           | 0.5  |
| Half cooked food                                  | 1           | 0.5  |
| Unwashed breasts                                  | -           | 0.0  |

After mothers had indicated how diarrhea spreads, they were again required to mention how they can prevent it. Still the mothers as demonstrated in the table below suggested a number of ways. The most common ways suggested were washing hands before eating 30%, boiling drinking water 22.8%, eating hot food 22%, and washing hands after latrine.

**Table 3.7 Perceived ways of avoiding diarrhea**

| Perceived ways of avoiding diarrhea | No (n =199) | %    |
|-------------------------------------|-------------|------|
| Washing hands before eating         | 59          | 29.9 |
| DK                                  | 46          | 23.4 |
| Boiling drinking water              | 45          | 22.8 |
| Proper fecal disposal               | 45          | 22.8 |
| Eating hot food                     | 43          | 21.8 |
| Washing hands after latrine         | 33          | 16.8 |
| Washing hands before serving food   | 31          | 15.7 |
| Cleaning utensils                   | 25          | 12.7 |
| Covering food                       | 17          | 8.6  |
| Eating nutritious food              | 6           | 3.0  |
| Eating ready food                   | 4           | 2.0  |

|                      |   |     |
|----------------------|---|-----|
| Personal hygiene     | 3 | 1.5 |
| Avoiding fatty foods | 2 | 1.0 |
| Giving soft foods    | 1 | 0.5 |
| Cleaning compound    | 1 | 0.5 |
| Local herbs          | 1 | 0.5 |
| Change in foods      | 0 | 0.0 |
| Others               | 1 | 1.0 |

### 2.3.5 Hand washing practices

#### a). When mothers normally wash hand

In the effort to establish further how to fight the spread of diarrhea, mothers were asked to indicate when they normally wash their hands.

The most common times mentioned of when they wash hands were after latrine use 71.7%, when hands are dirty 68.8%, and before eating 49.8%.

**Table 3.8 When mothers wash hands**

| When mothers wash hands                    | No  | %     |
|--|-----|-------|
| After latrine use                          | 124 | 71.7  |
| When dirty                                 | 119 | 68.8  |
| Before eating                              | 99  | 49.8  |
| Before serving food                        | 49  | 28.3  |
| Before feeding child                       | 28  | 16.2  |
| Morning                                    | 11  | 6.4   |
| After eating                               | 11  | 6.4   |
| After attending a child that has defecated | 9   | 5.2   |
| After peeling                              | 6   | 3.5   |
| After work                                 | 2   | 1.2   |
| Going to bed                               | 2   | 1.2   |
| Any time                                   | 1   | 0.6   |
| DK   | 0   | 0.0   |
| Before preparing food                      | 0   | 0.0   |
| Others                                     | 2   | 1.2   |
| Total                                      | 173 | 100.0 |

#### b). Hand washing facility at latrine

As the mothers were confessing of washing hands after latrine use, the study aimed also at establishing whether they have a hand washing facility with soap/ash present at the latrine. The majority of the homes surveyed, never had such facility (96%). This is a very general problem, which must also be addressed generally and massively.



### 2.3.6 Symptoms that would force the mothers to seek treatment for child with diarrhea

The most common symptom that mothers normally look for in order to take their children with diarrhea to the health facility to seek treatment were mainly weakness or tiredness of children 54.3%, prolonged diarrhea 29.4%, dehydration 23% and to some extent fever 19% and vomiting 15%. Other symptoms given are shown in the table below.

**Table 3.9 Symptoms that make the mother seek treatment or advice when child has diarrhea**

| Symptoms                      | No  | %    |
|-------------------------------|-----|------|
| Weakness or tiredness         | 107 | 54.3 |
| Prolonged diarrhea            | 58  | 29.4 |
| Not able to drink/breast feed | 53  | 26.9 |
| Dehydration                   | 45  | 22.8 |
| Fever                         | 38  | 19.3 |
| Vomiting                      | 30  | 15.2 |
| Blood in stool                | 29  | 14.7 |
| Too much diarrhea             | 14  | 7.1  |
| Yellow eyes                   | 1   | 0.5  |
| Nausea                        | 1   | 0.5  |
| Others                        | 4   | 2.0  |
| DK                            | 5   | 2.5  |
| Nothing                       | 2   | 1.0  |
| Total                         | 197 |      |

*Note that two mothers never gave a response to this question*

### 2. 3.7 False tooth extraction practices

The mothers were asked if the index child had had any false tooth extraction in last 12 months prior the survey. The index children studied had a good proportion of them 45.2% having gone through the false tooth extraction.

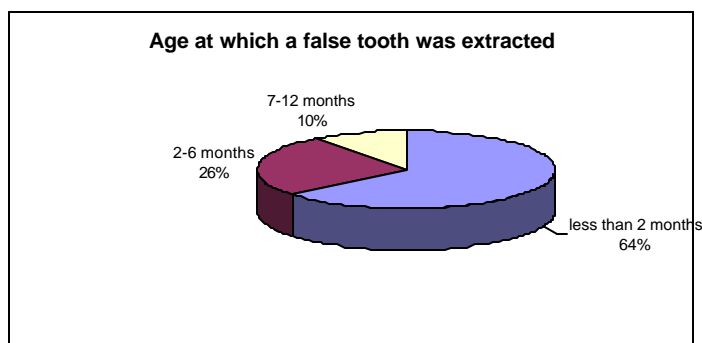
This is a very high proportion of children that suffer the exercise of false tooth extraction that exposes them to a number of infections and other damages.

**Table 3.10 Prevalence of false tooth extraction**

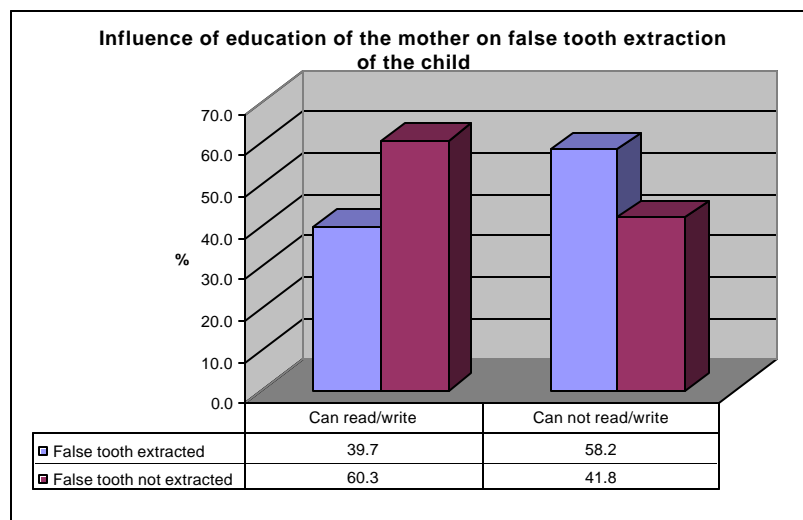
|  | False tooth extraction |    | Total |
|--|------------------------|----|-------|
|  | Yes                    | No |       |
|  |                        |    |       |

|              |      |      |     |
|--------------|------|------|-----|
| 0-5 months   | 30.0 | 70.0 | 60  |
| 6-11 months  | 51.2 | 48.8 | 43  |
| 12-23 months | 52.1 | 47.9 | 96  |
| Overall      | 45.2 | 54.8 | 199 |

The same what less affected so far are the children aged 0-5 months, and who can be protected if the program starts in time. Majority of these children gets the false tooth extraction when they are still very young i.e less than 2 months 64% or just before 6 months of age 26%.



The practice of false tooth extraction was found to be very much influenced by the education of the mother 36% (Gamma =0.358). The mothers who were able to read and write Among those who could read and write, majority never took their children for false tooth extraction as compared to those who can read and write. This is well confirmed by the association tests ( $X^2=6.1904$ ,  $DF = 1$ ,  $P =0.0128$ ) and in the figure below. Actually a child whose mother could not read and write had almost double the risk of having false tooth extraction than a child whose mother could read and write (**Odds ratio =1.5**).



## 2.4 IMMUNIZATION

The immunization issues were only focused on children aged less than 24 months. And a number of issues were studied as per information on health cards.

### 2.4.1 Possession of the vaccination records (health cards) for children by mothers

Mothers were asked if they possessed the vaccination records for the index child, and 58.8% of the children of interest had mothers who possessed their vaccination records.

The rest of the children had their mothers not having their vaccination records.

This was more so among the 0-5 months old children, and the proportion of the children whose mothers had the records was increasing with the age of the child ( $X^2=13.59$ ,  $DF=2$ ,  $P=0.001$ ). It may be that some time back mothers were told to keep the vaccination records of their children and that ended so that the new mothers do not religiously keep the records. One may need to find out why this trend.

**Table 4.1 Possession of immunization card for index child less than 24 months old**

|              | Have vaccination records |      | Total |
|--------------|--------------------------|------|-------|
|              | Yes                      | No   |       |
| 0-5 months   | 40.0                     | 60.0 | 60    |
| 6-11 months  | 60.5                     | 39.5 | 43    |
| 12-23 months | 69.8                     | 30.2 | 96    |
| Overall      | 58.8                     | 41.2 | 199   |

It is assumed that the children, who did not have the health cards, were never immunized against the all the immunizable diseases.

## 2.4.2 Immunization coverage

### a). BCG

As per the records on the health card, 57.8% (115 out of 199 children) showed that their children have been immunized against BCG.

**Table 4.2 BCG Immunization status**

| Age of child | BCG Coverage as per health cards only |                | Total |
|--------------|---------------------------------------|----------------|-------|
|              | Been given                            | Not been given |       |
| 0-5 months   | 38.3                                  | 61.7           | 60    |
| 6-11 months  | 60.5                                  | 39.5           | 43    |
| 12-23 months | 68.7                                  | 31.3           | 96    |
| Overall      | 57.8                                  | 42.2           | 199   |

BCG coverage was high among the 6-11 months and those aged 12-23 months as shown in the table.

### b). OPV

OPV0, on the health cards, out of 199 children below 2 years, 10.5% got OPV0, 55.8% got OPV1, 51.3% got OPV2, while 45.2% got OPV3. Details of age distribution are shown in the table below.

**Table Age distribution of children who got the OPV immunization.**

| Age of index child | OPV Coverage as per immunization cards only |                |                        |                |            |                |            |                | Total |
|--------------------|---|----------------|------------------------|----------------|------------|----------------|------------|----------------|-------|
|                    | OPV0  |                | OPV1                   |                | OPV2       |                | OPV3       |                |       |
|                    | Been given                                  | Not been given | Been given<br>received | Not been given | Been given | Not been given | Been given | Not been given |       |
| 0-5 months         | 16.7  | 83.3           | 31.7                   | 68.3           | 20.0       | 80.0           | 10.0       | 90.0           | 60    |
| 6-11 months        | 14.0  | 86.0           | 60.5                   | 39.5           | 55.8       | 44.2           | 48.9       | 51.1           | 43    |
| 12-23 months       | 5.21  | 94.8           | 68.7                   | 31.3           | 68.7       | 31.3           | 65.6       | 34.4           | 96    |
| Overall            | 10.5  | 89.5           | 55.8                   | 44.2           | 51.3       | 48.7           | 45.2       | 54.8           | 199   |

### c). DPT

The DPT coverage at different level by age of the child is shown in the table below. For the DPT1 coverage as per the health cards, out of 199 children below 2 years, 54.8% got it, while

50.3% got DPT2 and 44.2% got DPT3. The details of age distribution are shown in the table below.

**Table Age distribution of children who got the DPT immunization.**

|              | DPT Coverage as per immunization cards only |                |            |                |            |                | Total |
|--------------|---|----------------|------------|----------------|------------|----------------|-------|
|              | DPT1  |                | DPT2       |                | DPT3       |                |       |
|              | Been given                                  | Not been given | Been given | Not been given | Been given | Not been given |       |
| 0-5 months   | 30.0  | 70.0           | 18.3       | 81.7           | 10.0       | 90.0           | 60    |
| 6-11 months  | 58.2  | 41.8           | 53.5       | 46.5           | 44.2       | 55.8           | 43    |
| 12-23 months | 68.7  | 31.3           | 68.7       | 31.3           | 65.6       | 34.4           | 96    |
| Overall      | 54.8  | 45.2           | 50.3       | 49.7           | 44.2       | 55.8           | 199   |

#### **d). Measles**

63 children out of 199 (31.6%) who had the health cards had indicated that the child received the measles vaccine.

|              | Measles Coverage as per immunization cards only |                | Total |
|--------------|---|----------------|-------|
|              | Been given                                      | Not been given |       |
| 0-5 months   | 0   | 100            | 60    |
| 6-11 months  | 11.6  | 88.4           | 43    |
| 12-23 months | 60.4  | 39.6           | 96    |
| Overall      | 31.6  | 68.4           | 199   |

#### **2.4.2 Participation levels of children under 24 months in national immunization day**

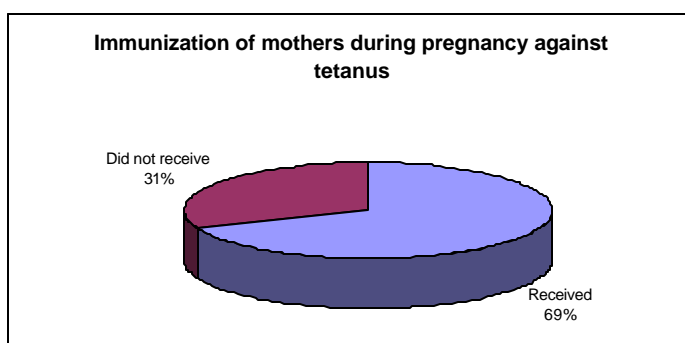
Out of 199 children, only 146 had the response on their participation in national immunization days given by their mothers. And among the 12-23 months old children, 99% of them had participated in the national immunization days, while among 6-11 months only 50% had participated, and yet another smaller proportion of 23% among the children aged 0-5 months had participated. This could be the reduction in fire of the national immunization days, which is why there is a reduction. The other possible reason could be the increased number of opportunities for the child to participate which increases with the age. However, generally 74% of the children aged 0-23 months that responded to the question had participated in the national immunization days.

**Table 4.8 Has child ever participated in national immunization days**

|              | Ever participated in national immunization days |      | Total |
|--------------|---|------|-------|
|              | Yes   | No   |       |
| 0-5 months   | 23.1  | 76.9 | 26    |
| 6-11 months  | 50.0  | 50.0 | 34    |
| 12-23 months | 98.8  | 1.2  | 86    |
| Total        | 74.0  | 26.0 | 146   |

#### **2.4.3 Immunization of mothers during pregnancy**

Mothers were asked if during pregnancy they received the injection to prevent the child from getting convulsions after birth, an anti-tetanus shot or an injection at the top of the shoulder. And about seven in every ten (69%) had received such an injection.



And 31% had the card or other documents with the immunization information. The majority hence never had any supporting evidence.

Out of 199 mothers, only 64 indicated when they received the immunization against tetanus, of whom 7 (10.9%) had received only one injection, 21 (32.8%) received the immunization twice, while 36 (56.3%) received it three times. In general, 28.6% of 199 mothers interviewed said they got at least two tetanus toxoid injections.

## 2.5 FEVER

### 2.5.1 Prevalence of fever among index children

The prevalence rate of fever among the children aged 0-23 months was standing at 29.8%, and the least hit children were those aged 0-5 months (15.3%).

**Table 5.1 Prevalence of fever among index children**

|              | Did child have fever |          | Total |
|--------------|----------------------|----------|-------|
|              | Had fever            | No fever |       |
| 0-5 months   | 15.3                 | 84.7     | 59    |
| 6-11 months  | 37.2                 | 62.8     | 43    |
| 12-23 months | 35.4                 | 64.6     | 96    |
| Overall      | 29.8                 | 70.2     | 198   |

### 2.5.2 Feeding habits of children with fever

This section looked at the children still breast-feeding, and those who had started eating solid/mashed food and drinking. The analysis is therefore focused on the three areas, the breastfeeding experience, the eating of solid/mashed food and drinking.

#### a) Breast feeding habits of index child with fever

Among the children that had fever and were still breast-feeding, the study wanted to know how they were breast fed during the time the child had fever. In this section of feeding habits, the total number of children was changing because children at different ages are able to drink and or eat in addition to breastfeeding, and hence if they have not started any of them, the mothers considered that issue as not applicable.

The study showed that out of 48 children, 66.7% of them were either breast-fed more or same during the time they had fever.

**Table 5.2 Breastfeeding experience of children with fever.**



|              | Did the child breast feed |               |                 |                                  | Total |
|--------------|---------------------------|---------------|-----------------|----------------------------------|-------|
|              | More than usual           | Same as usual | Less than usual | The child refused to breast feed | Total |
| 0-5 months   | 22.2                      | 55.6          | 11.1            | 11.1                             | 9     |
| 6-11 months  | 21.4                      | 35.7          | 28.6            | 14.3                             | 14    |
| 12-23 months | 28.0                      | 40.0          | 20.0            | 12.0                             | 25    |
| Total        | 25.0                      | 41.7          | 20.8            | 12.5                             | 48    |

### b). Taking of fluids by children with fever

Of the 53 children that had fever and had started drinking, 49.1% and 26.4% were able to drink more than usual and the same as usual respectively. In general, those who were able to drink as usual or more than usual were 75.5% as demonstrated in the table.

**Table 5.3 Drinking of fluids by child with fever**

|              | Able to drink during fever |               |                 | Total |
|--------------|----------------------------|---------------|-----------------|-------|
|              | More than usual            | Same as usual | Less than usual |       |
| 0-5 months   | 50.0                       | 50.0          | 0.0             | 4     |
| 6-11 months  | 33.3                       | 46.7          | 20.0            | 15    |
| 12-23 months | 55.9                       | 14.7          | 29.4            | 34    |
| Overall      | 49.1                       | 26.4          | 24.5            | 53    |

### c). Eating of solid/mashed food

The eating of solid/mashed food was somewhat poorer than drinking fluids among the children that had fever. In general, 64% of these children had to eat more or eat as usual during fever.

**Table 5.4 Eating of solid/mashed foods by child with fever**

|              | Able to eat solid/mashed food during fever |               |                 | Total |
|--------------|--|---------------|-----------------|-------|
|              | More than usual                            | Same as usual | Less than usual |       |
| 0-5 months   | 50.0                                       | 50.0          | 0.0             | 2     |
| 6-11 months  | 35.7                                       | 14.3          | 50.0            | 14    |
| 12-23 months | 32.4                                       | 35.3          | 32.4            | 34    |
| Overall      | 34.0                                       | 30.0          | 36.0            | 50    |

## 2.5.3 Treatment of children with fever

### a). Home fever treatment

Mothers of children that had fever were asked as to whether their children received treatment at home before seeking treatment outside. Out of 58 children that had fever, 48.3% had received treatment at home before going out to other places to seek treatment.

**Table 5.5 Child with fever getting treatment at home**

|              | Got treatment at home |      | Total |
|--------------|-----------------------|------|-------|
|              | Yes                   | No   |       |
| 0-5 months   | 55.6                  | 44.4 | 9     |
| 6-11 months  | 37.5                  | 62.5 | 16    |
| 12-23 months | 51.5                  | 48.5 | 33    |
| Overall      | 48.3                  | 51.7 | 58    |

The most common form of treatment that children with fever got at home was mainly traditional herbs 59.3 % and Chloroquine/qawaquine/malaraqune 59.3%. The proportion that received fansidar at home was only 3.7%.

**Table 5.6 Nature of treatment given to child with fever at home**

| Treatment given at home          | No | %    |
|----------------------------------|----|------|
| Chloroquine/qawaquine/malaraqine | 16 | 59.3 |
| Fansidar                         | 1  | 3.7  |
| Quinine                          | 1  | 3.7  |
| Aspirin                          | 1  | 3.7  |
| Panadol/maxadol                  | 16 | 59.3 |
| Traditional herbs                | 5  | 18.5 |
| Don't remember                   | 2  | 7.4  |
| Others                           | 2  | 7.4  |
| Total                            | 44 |      |

**b). Fever treatment outside home**

Apart from home, mothers were asked if they sought treatment of fever from outside home for their children. And about 88.1% said they went outside home and sought treatment for their children.

**Table 5.7 Whether child with fever got treatment outside home or not**

|              | Seek treatment outside home |      | Total |
|--------------|-----------------------------|------|-------|
|              | Yes                         | No   |       |
| 0-5 months   | 66.7                        | 33.3 | 9     |
| 6-11 months  | 100.0                       | 0.0  | 16    |
| 12-23 months | 88.2                        | 11.8 | 34    |
| Overall      | 88.1                        | 11.9 | 59    |

The children, who were taken outside home to seek treatment for fever, they were mainly taken to drug shops 36.5%, or government health facility/clinic 32.7%. Others were taken to private physicians 17.3%.

**Table 5.8 Where child with fever was taken for treatment other than home**

| Place where the child was first taken | No | %     |
|---------------------------------------|----|-------|
| Drug shop                             | 19 | 36.5  |
| Government health facility or clinic  | 17 | 32.7  |
| Private physician                     | 9  | 17.3  |
| Government hospital                   | 4  | 7.7   |
| Ordinary shop                         | 1  | 1.9   |
| Market drug vendor                    | 1  | 1.9   |
| Village health worker                 | 1  | 1.9   |
| Total                                 | 52 | 100.0 |

The treatment given to the child suffering from fever when taken outside home ranged from Panadol/maxadol 57.7%, chloroquine/dawaquine/malaraqine 51.9%, Quinine 32.7% and Fansidar 19.2% as the most common forms of treatments given, to Blood transfusion 1.9% as the least common. The details of other forms of treatment are shown in the table below.

**Table 5.9 Nature of treatment a child got when taken outside home**

| Treatment given outside home for fever | Frequency | %    |
|--|-----------|------|
| Panadol/maxadol                        | 30        | 57.7 |
| Chloroquine/dawaquine/malaraqine       | 27        | 51.9 |
| Quinine                                | 17        | 32.7 |

|                   |    |       |
|-------------------|----|-------|
| Fansidar          | 10 | 19.2  |
| Cough syrup       | 7  | 13.5  |
| Don't remember    | 4  | 7.7   |
| Asprin            | 3  | 5.8   |
| Mebendazole       | 3  | 5.8   |
| Traditional herbs | 2  | 3.8   |
| Blood transfusion | 1  | 1.9   |
| Others            | 6  | 11.5  |
| Total             | 52 | 100.0 |

#### 2.5.4 Knowledge of mothers about how to handle fever cases

##### a). Symptoms that would make mothers seek advice or treatment for children with fever.

The most common sign that mothers tend to observe on their sick children and would justify the taking of the child straight to the health facility or seek advice are weakness 37.2%, high temperature 2.5%, failure to breast feed or drink 34.7%, vomiting 31.2% and convulsions 25.6%. The other symptoms mentioned are indicated in the table below.

**Table 5.10 Symptoms that make mothers seek treatment away from home for child with fever**

| Symptoms                       | No  | %     |
|--------------------------------|-----|-------|
| General weakness               | 74  | 37.2  |
| Failure to breast feed/drink   | 69  | 34.7  |
| Breeding through the nose (10) | 63  | 31.7  |
| Vomiting everything            | 62  | 31.2  |
| Convulsions                    | 51  | 25.6  |
| Unconsciousness                | 17  | 8.5   |
| Don't know                     | 10  | 5.0   |
| Diarrhea                       | 8   | 4.0   |
| Yellow eyes                    | 7   | 3.5   |
| Stiff neck                     | 6   | 3.0   |
| High temperatures              | 5   | 2.5   |
| Shivering                      | 5   | 2.5   |
| Difficult in breathing         | 4   | 2.0   |
| Uncomfortable                  | 3   | 1.5   |
| Cough                          | 3   | 1.5   |
| Yellow urine                   | 1   | 0.5   |
| Crying a lot                   | 1   | 0.5   |
| Others                         | 4   | 2.0   |
| Total responses                | 199 | 100.0 |

##### b). What mother think cause malaria/fever

As a way of testing knowledge, mothers were asked to indicate how they think could the cause of malaria. They gave mainly mosquito bites 88.4% as the cause, though 12% said drinking un boiled water can cause malaria. One cannot forget to note that 10.6% said they do not know what causes malaria. Other responses included rain, poor feeding and worms as shown in the table.

**Table 5.11 What mothers Perceive as causes for malaria**

| Perceived Causes of malaria | No  | %    |
|-----------------------------|-----|------|
| Mosquito bites              | 176 | 88.4 |

|   |     |       |
|---|-----|-------|
| Drinking un boiled water                  | 24  | 12.1  |
| Don't Know                                | 21  | 10.6  |
| Eating mangos, fresh maize etc            | 10  | 5.0   |
| Change of weather or being beaten by rain | 8   | 4.0   |
| Worms                                     | 3   | 1.5   |
| Poor feeding                              | 2   | 1.0   |
| Poor hygiene                              | 2   | 1.0   |
| Bushes                                    | 0   | 0.0   |
| Stagnant water                            | 0   | 0.0   |
| Others                                    | 8   | 4.0   |
| Total                                     | 199 | 100.0 |

### c. What is done to prevent children from getting malaria?

The common ways that mothers know of preventing malaria from attacking them and their children were given and summarized in the table below. The most common ones are clearing compound 23.4%, eliminating stagnant water 19.6%, using mosquito nets 22.1%, closing windows and doors early 24.9% and boiling drinking water 15.7%. However, 22.5% said there is nothing they can do to prevent malaria.

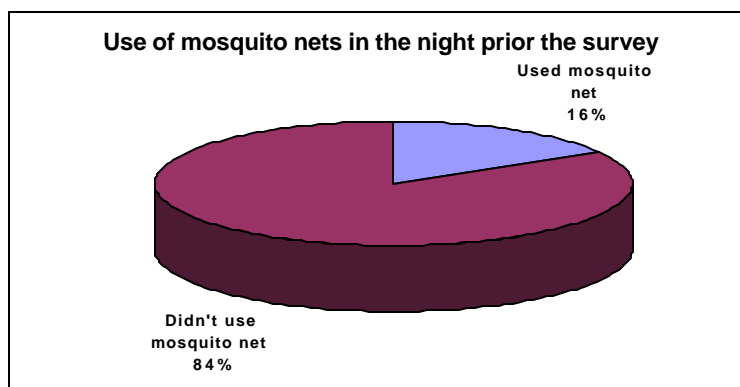
**Table 5.11 Perceived ways of avoiding malaria**

| Perceived ways of avoiding malaria      | Count | Cases |
|---|-------|-------|
| Closing windows and doors early         | 49    | 24.9  |
| Clearing the compound                   | 46    | 23.4  |
| Nothing                                 | 46    | 23.4  |
| Using ITNs                              | 44    | 22.1  |
| Eliminating stagnant water              | 39    | 19.6  |
| Boiling drinking water                  | 31    | 15.7  |
| Using anti-malarial                     | 9     | 4.6   |
| Don't know                              | 9     | 4.6   |
| Using household sprays                  | 6     | 3.0   |
| Cover body at night                     | 5     | 2.5   |
| Avoiding eating mangoes/fresh maize etc | 4     | 2.0   |
| Traditional herbs                       | 3     | 1.5   |
| Using local repellants                  | 1     | 0.5   |
| Others                                  | 9     | 4.6   |
| Total responses                         | 199   | 100.0 |

## 2.5.5 Use and handling of ITNs

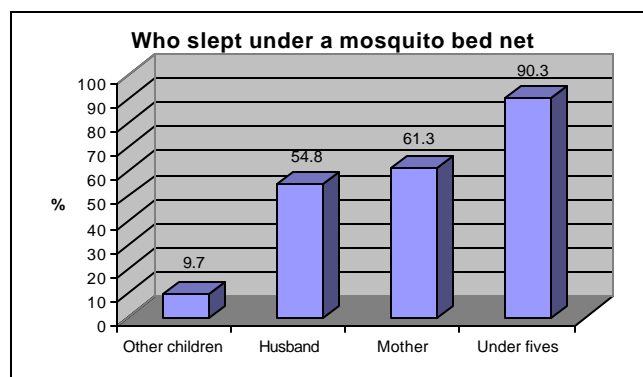
### a). Use of ITNs

Mothers were asked whether if at all any of their household members used an ITN or not. The mosquito nets were found to be used by only 16% of 199 households visited during the survey.



This was irrespective of who used the net during that night.

When the mothers were then asked to specify who slept under the net, it was found that majority were children under five years as demonstrated in the bar chart below. The analysis of who slept under the ITN was only therefore restricted to only those that had anybody sleeping under the net.



Among those who slept under the ITNs, the children under five were the majority (90.3%), the other household members that slept under the net were mothers 61.3%, husband 54.8%. The proportion of other children that sleep under the net was small 9.7% as shown above. It should be noted, however, that out of the 199 children aged 0-23 months only 28 of them (14%) slept under ITN the previous night of the survey. The mosquito nets for children were found to on average 12.96 months old, with the newest being 1 month old and the oldest 48 months old.

Most of the nets were acquired about 12 months ago, with trend of acquiring them being positively skewed, meaning most of the nets are new nets and just a few are old nets in terms of age.

### **b. Treatment of the mosquito nets with mosquito repellants**

When mothers were asked the months that have passed when the nets were last dipped in the repellant, only 15 out of 28 (53.6%) had dipped the nets, of whom 33.3% had done it one month prior the survey. 6.7% said two months ago, 6.7% said 3 months ago and 4 months ago and five months ago, and 40% could not remember when the dipping was last done.

Most of the nets for the children under two years were dipped twice, 40%, though about 20% were dipped only once and the rest dipped them 3 to 5 times ever since they were bought.

**Table 5.12 Times the ITNs have been re-dipped**

| Times re-dipped | Frequency | %            |
|-----------------|-----------|--------------|
| 1.00            | 1         | 20.0         |
| 2.00            | 2         | 40.0         |
| 3.00            | 1         | 20.0         |
| 5.00            | 1         | 20.0         |
| <b>Total</b>    | <b>5</b>  | <b>100.0</b> |

### **c. Washing of the ITN**

Most of the mothers (60.7%) confessed of having ever washed the ITNs of their children under two as shown in the table below.

**Table 5.13 Washing of ITN**

| Washing of the ITN | Freq | % |
|--------------------|------|---|
|--------------------|------|---|

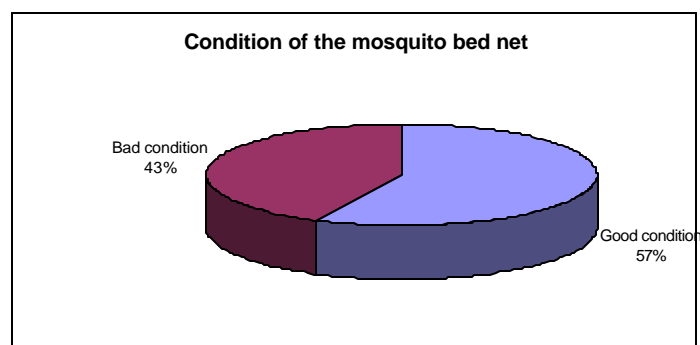
|              |    |       |
|--------------|----|-------|
| Washed       | 17 | 60.7  |
| Never washed | 11 | 39.3  |
| Total        | 28 | 100.0 |

Whereas the mothers who said they have ever washed the ITNs had acquired the said ITN slightly earlier (16 months) than those who said they have never (14 months), the data indicated that the average ages of the ITNs are not significantly different (ANOVA F computed =0.351 P =0.556). This may imply that mothers just do not wash ITNs for the children whether the ITN is new or old, the age of the ITN may be used as an excuse but there is no evidence for that. For those that have washed the ITN, the majority has done it only either once 25%, or twice 25% or just three times 25%. This is shown in the table below.

**Table 5.14 Number of times the mosquito bed has been washed**

| Times washed the net | Frequency | %     |
|----------------------|-----------|-------|
| 1.00                 | 4         | 25.0  |
| 2.00                 | 4         | 25.0  |
| 3.00                 | 4         | 25.0  |
| 4.00                 | 1         | 6.3   |
| 5.00                 | 1         | 6.3   |
| 6.00                 | 2         | 12.5  |
| Total                | 16        | 100.0 |

When the mother indicated that an index child slept under the net, she was asked to bring the net for observation by the enumerator. The nets, which were found with holes, were categorized as in



bad state, while those still intact were in good state. From the data, 57% of the observed nets were in good state and were somewhat effective in protecting the children from mosquito bites.

### 2.5.6 'Millet' extraction prevalence and practices

In general terms, 10.6% of the index children were taken for 'millet' extraction in 12 months prior the survey. It is not clear whether some mothers refused to commit themselves and simply said don't know.

**Table 5.15 Prevalence levels of 'millet extraction'**

|              | Ever been taken for millet extraction |      |            | Total |
|--------------|---------------------------------------|------|------------|-------|
|              | Yes                                   | No   | Don't Know |       |
| 0-5 months   | 6.7                                   | 88.3 | 5.0        | 60    |
| 6-11 months  | 14.0                                  | 81.4 | 4.7        | 43    |
| 12-23 months | 11.5                                  | 88.5 | 0.0        | 96    |
| Overall      | 10.6                                  | 86.9 | 2.5        | 199   |

Most of these children have been taken for the extraction of the 'millet' at an age of 7-12 months as shown in the chart below.



## 2.5.7 Knowledge and practice of mothers in preventing malaria during pregnancy

### a). How one can prevent malaria during pregnancy

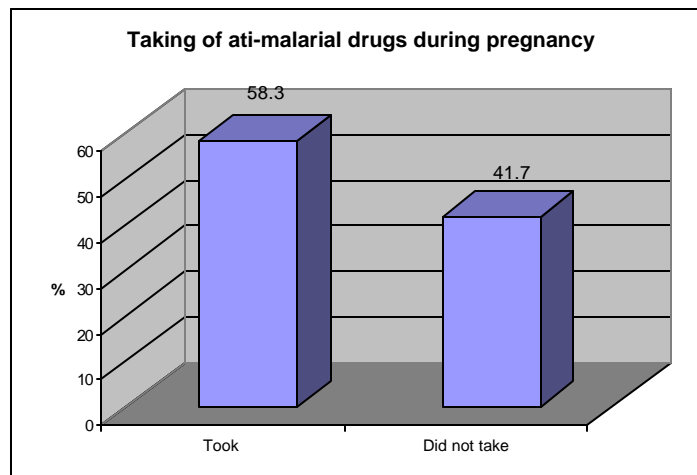
The following ways are known to the mothers, through which they can avoid malaria when they are pregnant. The most common ones are use of ITNs 46%, taking anti-malarial 38.4%, closing windows and doors early 20.2% and others as indicated in the table.

**Table 5.14 Perceived ways of how a pregnant mother can prevent fever/malaria**

| How a pregnant mother can prevent fever/malaria | No  | %    |
|---|-----|------|
| Use ITNs  | 91  | 46.0 |
| Take anti-malarial drugs                        | 76  | 38.4 |
| Windows and doors are closed                    | 40  | 20.2 |
| Don't Know                                      | 29  | 14.6 |
| Compound cleared of bush                        | 21  | 10.6 |
| Stagnant water cleared                          | 17  | 8.6  |
| Nothing   | 14  | 7.1  |
| Use mosquito coil                               | 5   | 2.5  |
| Feeding well                                    | 5   | 2.5  |
| Anti-mosquito insecticide is sprayed            | 4   | 2.0  |
| Burn plant leaves                               | 4   | 2.0  |
| Burn cow dung                                   | 1   | 0.5  |
| Attend Antenatal care                           | 1   | 0.5  |
| Avoid un boiled water                           | 1   | 0.5  |
| Sleeping early                                  | 0   | 0.0  |
| Others  | 1   | 0.5  |
| Total responses                                 | 198 | 100  |

**b). Practice of the pregnant mother in taking anti-malarial drugs**

Whereas it is advisable that pregnant mothers should take anti-malarial drugs during pregnancy, about 41.7% of the mothers confessed that they never took the drugs during pregnancy of the



youngest child. This is a very high proportion that should be brought down.

The most common drug taken by the pregnant mothers was fansidar 84.5% and only 9.5% said they took chloroquine while the rest took other drugs.

**Table 5.15 Anti-malarial drug taken by mothers during pregnancy**

| Drug taken during pregnancy | Freq | %     |
|-----------------------------|------|-------|
| Chloroquine                 | 11   | 9.5   |
| Fansidar                    | 98   | 84.5  |
| Others                      | 7    | 5.0   |
| Total                       | 116  | 100.0 |

**c). Place where mothers go for the drugs**

Most mothers said they obtained the drugs from Health center III 49.6%, and health center IV 15.7%, while others went to private clinics 11.3%. Only 7.8% went to hospital. The rest of the sources are shown in the table.

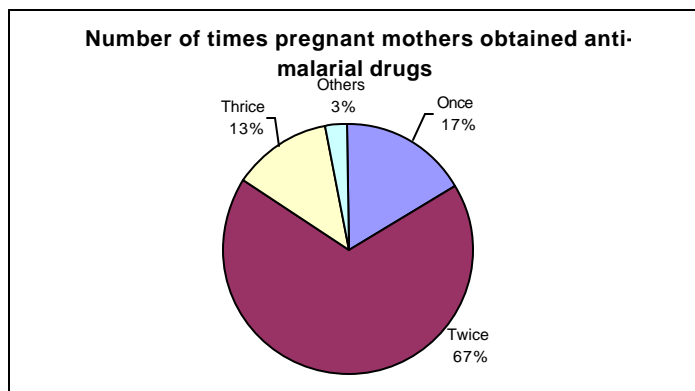
**Table 5.16 Place where pregnant mothers went for anti-malarial drugs**

| Place where pregnant mothers went for drugs | Frequency | %     |
|---|-----------|-------|
| Health center III                           | 57        | 49.6  |
| Health center IV                            | 18        | 15.7  |
| Private clinic                              | 13        | 11.3  |
| Hospital                                    | 9         | 7.8   |
| Drug shop                                   | 6         | 5.2   |
| Traditional birth Attendant                 | 1         | 0.9   |
| Others                                      | 11        | 9.6   |
| Total                                       | 115       | 100.0 |

**d). Number of times the mothers got the ant-malarial drugs**

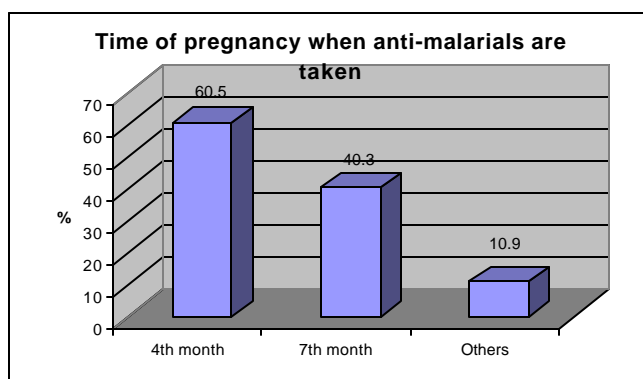
Majority of the mothers said they got the drugs twice 67%, while 17% got the drugs once and 14% got them thrice. This is shown in the chart below.





#### e). Time of pregnancy when the anti-malarial drugs were taken

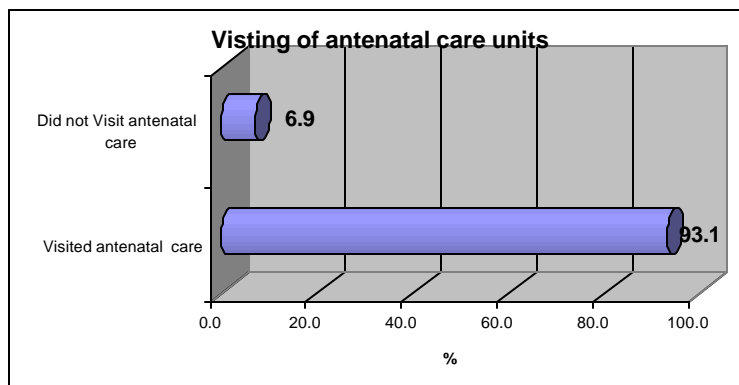
The mothers that had had the anti-malarial drugs were asked the stage of pregnancy when the drugs were taken. The majority mentioned at 4<sup>th</sup> month 60.5%. The others took the drugs at different stages as shown in the bar chart.



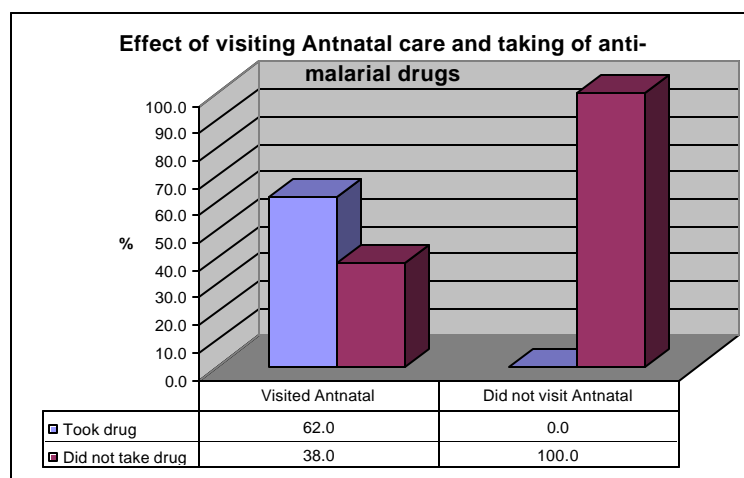
Looking at those who took the anti-malarial at the 4<sup>th</sup> and 7<sup>th</sup> month of pregnancy as recommended, it was found that out of 199 only 11 (5.5%) of the pregnant mothers did it. This is still a very low proportion.

#### 2.5.8 Use of antenatal care facilities during pregnancy

The visiting of health facilities for the antenatal care services was very high among the mothers (94%) as demonstrated in the figure below. This was as done during the last pregnancy that the mothers had where mothers visited the facilities.



The data also further showed that there was a strong association between the mother visiting the antenatal clinic and taking of anti-malarial drugs during pregnancy ( $X^2=17.847$ ,  $DF =1$ ,  $P =0.000$ ). Among the mothers that visited the antenatal facilities, they all took anti-malarial drugs during pregnancy, while those who never visited, 14% never took the drugs. The effect is that 100% of the pregnant mother taking the anti-malarial drugs during pregnancy is influenced by her going to the antenatal facilities (Gamma =1.00). This is shown by the fact that 100% of those who visited took the drugs, and this may be due to the emphasis that staff put on the taking of the anti-malarial drugs.



The most common place that mothers went for the antenatal care services were health center 76.2%, and to some extent clinics 17.5%. Other places are indicated in the table below.

**Table 5.17 Place that mothers went for antenatal care services**

|                               | No  | %     |
|-------------------------------|-----|-------|
| Staff at health center        | 144 | 76.2  |
| Staff in clinic               | 33  | 17.5  |
| TBA                           | 5   | 2.7   |
| Community based health worker | 5   | 2.7   |
| Drug shops owner/attendant    | 1   | 0.5   |
| Others                        | 1   | 0.5   |
| Total                         | 189 | 100.0 |

## 2.6 HIV/AIDS

### 2.6.1 Knowledge of HIV/AIDS

Out of 199 mothers interviewed, only 1 said she has never heard of AIDS. Hence 99.5% have ever heard of AIDS, which is almost 100%.

### 2.6.2 How one can tell that some one has AIDS

The main signs that mothers said they look up to in order to know that some one has HIV/AIDS are mainly loss of weight 70.7%, skin rash 46.5%, persistent fever 13.6%, diarrhea 16.7% and cough 27.8%. Other signs are as outline in the table below.

**Table 6.1 Perceived ways that one knows that some one has AIDS**

| How one knows that some one has AIDS | No  | %    |
|--------------------------------------|-----|------|
| Loss of weight                       | 140 | 70.7 |

|                               |     |       |
|-------------------------------|-----|-------|
| Skin rash                     | 92  | 46.5  |
| Cough                         | 55  | 27.8  |
| Diarrhea                      | 33  | 16.7  |
| Persistent fever              | 27  | 13.6  |
| Boils                         | 25  | 12.6  |
| Constant sickness             | 23  | 11.6  |
| Hair loss                     | 21  | 10.6  |
| Don't Know                    | 13  | 6.6   |
| Clinical testing HIV positive | 7   | 3.5   |
| Herpes booster                | 6   | 3.0   |
| Spots on the body             | 4   | 2.0   |
| Itching of the body           | 4   | 2.0   |
| Red lips                      | 4   | 2.0   |
| Dehydration                   | 2   | 1.0   |
| Skin ulcers                   | 2   | 1.0   |
| If people start saying it     | 2   | 1.0   |
| Loss of appetite              | 1   | 0.5   |
| Anemic                        | 1   | 0.5   |
| Over sleeping                 | 0   | 0.0   |
| Vomiting                      | 0   | 0.0   |
| Others                        | 11  | 5.6   |
| Total responses               | 198 | 100.0 |

### 2.6.3 Perceived ways of avoiding HIV/AIDS

Of the 200 mothers interviewed, 4 opted not to answer the question of whether they think some one can avoid AIDS. However, of the 196 that answered, 93.4% said they think some one can avoid AIDS, while 2.6% said it is not possible to avoid it and 4.1% said they do not know if one actually avoids it.

**Table 6.2 Attitude of whether one can or cannot avoid HIV/AIDS**

| Can one avoid AIDS | Freq | %     |
|--------------------|------|-------|
| Yes                | 183  | 93.4  |
| No                 | 5    | 2.6   |
| DK                 | 8    | 4.1   |
| Total              | 196  | 100.0 |

The how to avoid AIDS, mothers gave many ways through which this can be done as shown in the table below.

Many responses were given by mothers on possible ways of avoiding AIDS, but the most common ones were abstaining from sex 78.4%. Use of condom 51.8% and limiting sex to one partner 31.2%. The other ways are shown in the table.

**Table 6.3 Perceived ways of how to avoid HIV/AIDS**

| How to avoid HIV/AIDS                                 | Count | Cases |
|---|-------|-------|
| Abstain from sex                                      | 156   | 78.4  |
| Use condom  | 103   | 51.8  |
| Limit sex to one partner/stay faithful to one partner | 62    | 31.2  |
| Avoid drinking from the same cup                      | 23    | 11.6  |
| Avoid sharing razor blades                            | 16    | 8.0   |
| Avoid kissing   | 4     | 2.0   |

|  |     |       |
|--|-----|-------|
| Give birth in hospital                               | 4   | 2.0   |
| Limit the number of sexual partners                  | 2   | 1.0   |
| Go to TASO   | 2   | 1.0   |
| Don't Know   | 2   | 1.0   |
| Avoid sex with prostitutes                           | 1   | 0.5   |
| Avoid sex with a person who has many sexual partners | 1   | 0.5   |
| Others   | 1   | 0.5   |
| Avoid blood transfusion                              | 0   | 0.0   |
| Avoid injection                                      | 0   | 0.0   |
| Use own syringes and needles                         | 0   | 0.0   |
| Total responses                                      | 199 | 100.0 |

And actually 68.8% of 199 mothers with children 0-23 months interviewed were able to cite at least two known ways of avoiding HIV/AIDS

#### 2.6.4 Knowledge of ways of transfer of HIV/AIDS virus from mother to child

Mothers were asked if they knew different ways through which the virus that causes AIDS may be transferred from the mother to the child during different stages and responses are as shown in the table.

During pregnancy, 65.7% of the interviewed mothers said the child could get the virus from the mother, while 25.8% said the child cannot get the virus.

At the delivery point, 85.4% of the interviewed mothers said it is possible for the child to get AIDS from the mother while 9.1% said the child would remain safe.

During breast feeding, however, a very high proportion expressed ignorance of the fact that a virus can be transferred to the child from the positive mother 20% and those who said no also were high 22.7%, while just 57.6% said the child can get the virus during breast feeding

**Table 6.4 Knowledge of ways of transfer of HIV/AIDS virus from mother to child**

| Response     | Can a HIV/AIDS virus be transferred from the mother to child during |            |                |
|--------------|---|------------|----------------|
|              | Pregnancy   | Delivery   | Breast feeding |
| Yes          | 65.7  | 85.4       | 57.6           |
| No           | 25.8  | 9.1        | 22.7           |
| DK           | 8.6   | 5.6        | 19.7           |
| <b>Total</b> | <b>199</b>  | <b>199</b> | <b>199</b>     |

Those who said they that a child get AIDS at pregnancy, delivery and breastfeeding were 72 out of 199 (36.2%). The rest either mentioned some or none but not all the above three as possible ways through which a child may get the AIDS virus from a mother.

It was found that 72 out of 199 mothers with children aged less than 24 months (36.2%) knew the fact that HIV/AIDS virus can be transmitted from the mother to the child through **ALL** the three ways i.e. during pregnancy, delivery and breastfeeding.

#### 2.6.5 Testing of HIV/AIDS services and practices

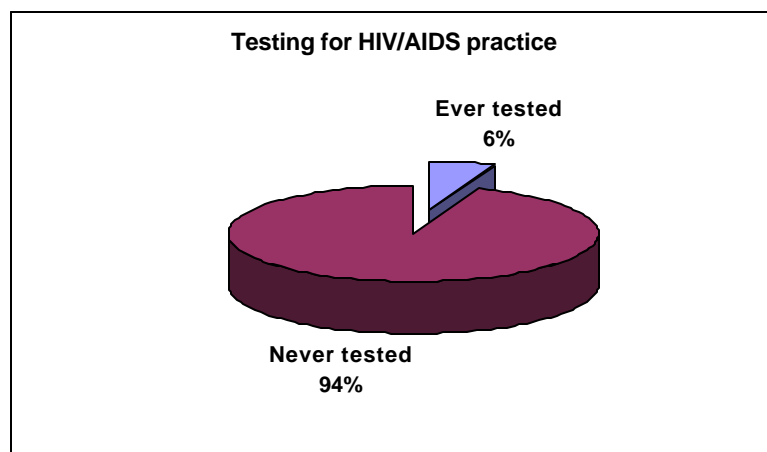
91.9% of the 199 mothers interviewed said they have heard of testing for HIV/AIDS services, while 7.6% have not heard of them, while 0.5% just does not know.

And most of the mothers said if they wanted to test for the HIV/AIDS they would just go to hospitals 50.8%, or VCT center 38.2%. Other places mentioned are indicated in the table.

**Table 6.5 Place where mothers think one can go for testing of HIV/AIDS**

| Place where to test for HIV/AIDS | Frequency | %     |
|----------------------------------|-----------|-------|
| Hospital                         | 101       | 50.8  |
| VCT center                       | 76        | 38.2  |
| Health clinic                    | 8         | 4.0   |
| Others                           | 14        | 7.0   |
| DK                               | 14        | 7.0   |
| Total                            | 199       | 100.0 |

When the mothers were asked to indicate if they have ever tested for the HIV/AIDS, one mother out of 199 never answered the question, and those who answered majority have never tested. Only 5.5% said they have ever tested for the HIV/AIDS.



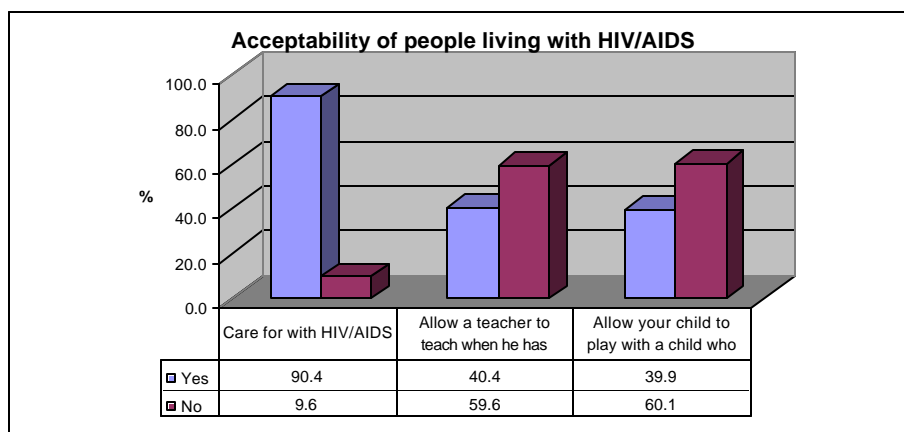
Those who have ever tested, 90% of them had received counseling before getting tested, and again 90% got the results. And of those who received the results, 77.8% got counseling after they had the results.

#### **2.6.6 Acceptability of people living with HIV/AIDS**

A number of issues were put before the mothers and they were used to access how people living with HIV/AIDS are accepted in the community where they live. One of the issues raised was a relative falling sick of HIV/AIDS and getting care from a relative. Majority of the mothers said they can look after them very well 90.4% and only 9.6% said they cannot.

Another issue raised with the mother was of teachers that have AIDS but not sick, whether they should be allowed to teach or not. Quite a good proportion of the mothers said they should not be allowed to teach 59.6%. This could be attributed to a number of issues like the defilement cases of pupils by teachers and this may put the mothers in a tricky situation to comment other wise.

What of the children playing with other children who have HIV/AIDS, most of the mothers said no to that (60%).



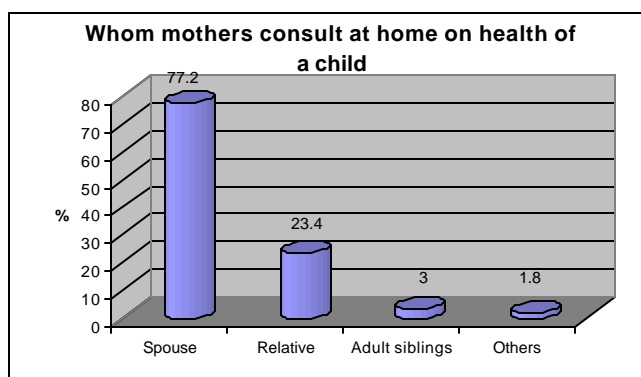
This means the social acceptance of people living with HIV/AIDS have not yet been fully accepted in the communities they stay in.

## 2.7 CARE SEEKING

### 2.7.1 Consultations about health at household level

Mothers were asked if they do consult at household level about the health of her children, and 84.3% said they do have some one that they normally consult, while 15.7% do not.

The person(s) whom mothers consult are normally spouse(s) 77%; relatives 23.4% and others consult older siblings. This indicates that the health issues of the child at household level they are not only on the shoulders of the mother but the farther to.



Other than household level, mothers do consult other people who are not those in the household. And about 84.6% said they do consult other people other than the members of the household about the health of the children while 15.4% do not.

And the people that mothers normally consult about the health of the children are neighbors 55%, mother in-laws 36.1%, medical doctors 6.5%, community health workers 10.1%, TBA 6.5% and to some extent grand mothers 12.4%. The rest of the people consulted by mothers are shown in the table 7.1

**Table 7.1 People that mothers consult outside home about health of their children**

| People that mothers consult outside home | Frequency | %    |
|--|-----------|------|
| Neighbor                                 | 93        | 55.0 |
| Mother in-law                            | 61        | 36.1 |
| Grandmother                              | 21        | 12.4 |
| Community health worker                  | 17        | 10.1 |

|                    |     |       |
|--------------------|-----|-------|
| Mother             | 16  | 9.5   |
| Friends            | 13  | 7.7   |
| Medical doctor     | 11  | 6.5   |
| TBA                | 11  | 6.5   |
| Traditional healer | 3   | 1.8   |
| Religious leader   | 0   | 0.0   |
| Others             | 12  | 7.1   |
| Total              | 169 | 100.0 |

### 2.7.2 Cases where mothers think a sick child should be taken to health facility right away.

Mothers listed a number of instances when they have to rush their sick children to health facility straight away, and the most common as shown in the table were fever 70.41%, child becoming 'sicker' 38.7%, when not able to breast feed or drink 20.6%. Others are breathing fast 25.6%, drinking poorly 12.6%, and vomiting 14.1%.

**Table 7.2 When the mothers said they would take the sick child straight to health facility**

| When the mothers said they would take the sick child straight to health unit | No  | %     |
|--|-----|-------|
| Child develops fever   | 140 | 70.4  |
| Child becomes sicker   | 77  | 38.7  |
| Child has difficulty in breathing  | 51  | 25.6  |
| Child not able to drink/breast feed  | 41  | 20.6  |
| Child has fast breathing   | 29  | 14.6  |
| Vomiting   | 28  | 14.1  |
| Child is drinking poorly   | 25  | 12.6  |
| Diarrhea   | 16  | 8.0   |
| Convulsions  | 13  | 6.5   |
| Child has blood in stool   | 12  | 6.0   |
| Don't Know   | 6   | 3.0   |
| Change of eyes like sunken eyes  | 2   | 1.0   |
| Pimples  | 1   | 0.5   |
| Shivering  | 1   | 0.5   |
| Cough  | 1   | 0.5   |
| Crying   | 1   | 0.5   |
| Yellow urine   | 1   | 0.5   |
| Stiff neck   | 1   | 0.5   |
| Unconsciousness  | 1   | 0.5   |
| Kwashiorkor  | 0   | 0.0   |
| Others   | 6   | 3.0   |
| Injury   | 0   | 0.5   |
| Total responses  | 199 | 100.0 |

### 2.7.3 Actual health seeking by mothers for children

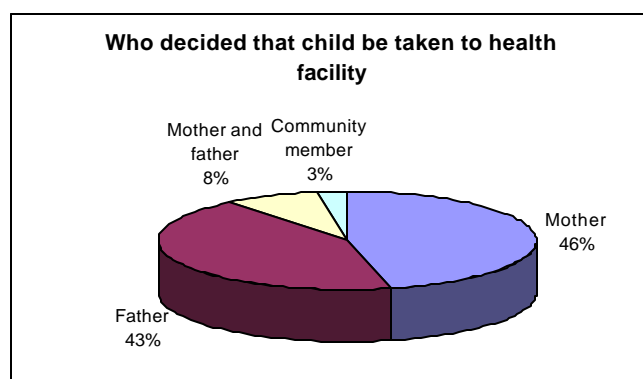
Of the 199 mothers interviewed, 179 (90.0%) had ever taken their children to health facility.

It was important to know how many days that had to pass between the time the mother knew that the child was sick and the actual taking of the child to the health unit. The majority of the mothers waited up to 1 day 35.2%, though others just took the child straight away 17.9% while others waited up to two days 26.3%. In some instances mothers waited up to 8 days and above as shown in the table. This however, must have depended mainly on the severity of the sickness and how the mother viewed the child.

**Table 7.3 Days that passed before taking the child to health unit after knowing that the child was sick**

| Days that passed before taking the child to health unit after knowing that the child was sick | No  | %     |
|---|-----|-------|
| The very day  | 32  | 17.9  |
| One day   | 63  | 35.2  |
| Two days  | 47  | 26.3  |
| Three days  | 17  | 9.5   |
| Four days   | 6   | 3.4   |
| Seven days  | 11  | 6.2   |
| Eight days  | 1   | 0.6   |
| Fourteen days   | 1   | 0.6   |
| Thirty days   | 1   | 0.6   |
| Total   | 179 | 100.0 |

The decision to take the sick child to health unit was made mainly by the mother 46% or the father 43% and in some instances both 8%, though in some cases community members came in to take the child to health center 3%. This could have been in the absence of the parents at home may be when the child became sick.



And eventually, mother 87.7% mainly took the child to health unit. The cases where the fathers took sick children to health unit were only reported by 2.8% of the women.

**Table 7.4 Who took the child to health unit**

| Who took the child to health unit | Freq | %     |
|-----------------------------------|------|-------|
| Mother                            | 157  | 87.7  |
| Father                            | 5    | 2.8   |
| Others                            | 17   | 9.5   |
| Total                             | 179  | 100.0 |

When the children were taken to the health unit, only 43.3% of them were asked to be taken back to the health unit, the rest did not need a call back. And of those asked to be taken back, only 80.3% were actually taken back, the rest 19.7% just stayed home.

**Table 7.5 Took back the child as required**

| Took back the child as required | Frequency | Valid Percent |
|---------------------------------|-----------|---------------|
| Yes                             | 61        | 80.3          |
| No                              | 15        | 19.7          |
| Total                           | 76        | 100.0         |



The main reasons given for not taking back the child to the health unit as required were child becoming well before the appointment time (73.3%). In some instances, the mothers just waited to see a change

**Table 7.6 Reasons why mothers did not take children back.**

| Reasons why mothers did not take children back. | Freq | %     |
|---|------|-------|
| Could not afford additional costs               | 1    | 6.7   |
| Child became well before referral was due       | 11   | 73.3  |
| Others  | 2    | 13.3  |
| Total   | 15   | 100.0 |

#### **2.7.4 Referral experiences and responses by mothers to such referrals**

Other than taking the sick child back to the health worker, mothers were asked if the health workers referred them to other health units/hospitals. And 17.7% of the 34 mothers that had taken the children sick to health workers said they were referred to other health units. All of them were referred to a hospital.

**Table 7.7 Mothers with sick children being referred**

| Were you ever referred | No | %     |
|------------------------|----|-------|
| Yes                    | 3  | 17.7  |
| No                     | 14 | 82.4  |
| Total                  | 17 | 100.0 |

Of 3 mothers referred to the hospital with their children, 2 managed to go there (66.7%) while the other one failed to go there. And the main reason given for failing to go there was that the additional costs were affordable.

#### **2.7.5 Accessibility and evaluation of the health services**

It was of big concern as to why some mothers may prefer other sources of treatment for their sick children to the health facility.

##### **a) Constraints that discourage mothers from taking sick children to common health unit**

The main deterrent, which was mentioned by mothers, was financial costs involved 65.5%. Knowing that this is a peasant community, any thing that involves money puts off many people. It would be very dangerous if people fail to get access to health facilities due to costs. The other issues raised by mothers were long distance 13.2%, and when the mother is herself sick and yet the children are taken to these health facilities by their mothers. This may call for the sensitization of men to take personal responsibility when children fall sick to see that they are taken to health units and are given treatment.

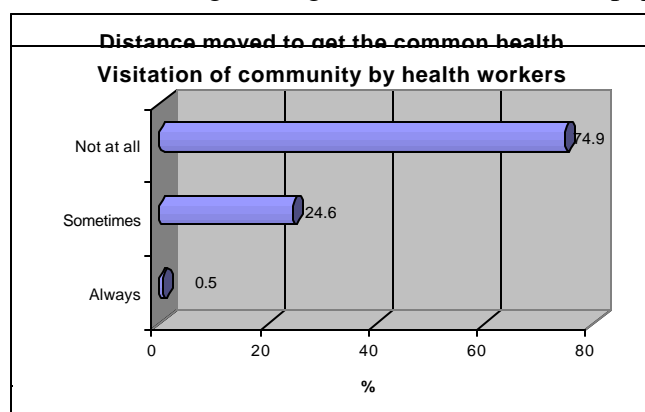
**Table 7.8 Why mothers may fail to take their sick children to the health unit**

| Why mothers may fail to take their sick children to the health unit | Frequency |      |
|---|-----------|------|
| Financial costs   | 129       | 65.5 |
| Nothing   | 51        | 25.9 |
| Distance  | 26        | 13.2 |
| When mother is sick   | 12        | 6.1  |
| Quality of care is less than satisfactory                           | 8         | 4.0  |
| Lack of decision making capacity to take child to health unit       | 8         | 4.0  |
| Easy access to drugs outside health facility                        | 4         | 2.0  |

|                                |     |       |
|--------------------------------|-----|-------|
| Competing needs in household   | 3   | 1.5   |
| Disease to be treated by herbs | 2   | 1.0   |
| Transport                      | 2   | 1.0   |
| Time away from work            | 1   | 0.5   |
| Cultural beliefs               | 1   | 0.5   |
| If not seriously sick          | 1   | 0.5   |
| Time away from other children  | 0   | 0.0   |
| Others                         | 1   | 0.5   |
| Total                          | 197 | 100.0 |

#### b). Distances moved by mothers to the common health unit

On the evaluation of the accessibility, the study looked at the distances that mothers move in order to reach the common health facility, and 60.1% were moving a distance of less than 5 kms, while 32.8% move 5-10 kms and the rest 7.1% move for more than 10 kms. This may be a long distance in a village setting where over 90% of the population travels by foot.



### 2.5.6 Visitation of communities by health workers

The other area evaluated was the health works and the community perception. Mothers were asked if the health workers normally visit the communities that they serve. And the mothers revealed very interesting results. 72.7% said these health workers have never visited the communities while 27% said they do visit sometimes while only 0.3% said they always visit the communities. If part of the role of the health workers is to visit the communities, then this is an indication that they are not doing well on this aspect.

## Attachment 1

### Survey Clusters

| Sub-county | Parish     | Villages          | Cluster No | Population hhds | Sample size hhds |
|------------|------------|-------------------|------------|-----------------|------------------|
| Kayonza    | Kabasheshe | Kabasheshe Center | 1          | 94              | 11               |
| Kayonza    | Katooma    | Kyabukuju         | 2          | 47              | 6                |
| Kayonza    | Kijubwe    | Shagasha          | 3          | 57              | 7                |

|         |           |            |    |    |    |
|---------|-----------|------------|----|----|----|
| Kayonza | Kyobwe    | Nyakigyera | 4  | 59 | 7  |
| Ihunga  | Butanda   | Butanga    | 5  | 55 | 7  |
| Ihunga  | Butanda   | Kyenkuku   | 6  | 56 | 7  |
| Ihunga  | Kagamba   | Kasyoro 1  | 7  | 57 | 7  |
| Ihunga  | Kitondo   | Kyabugimbi | 8  | 81 | 10 |
| Ihunga  | Nyakibigi | Kiziko     | 9  | 70 | 8  |
| Ihunga  | Rutunguru | Rujumo 1   | 10 | 55 | 7  |

|           |             |              |    |    |    |
|-----------|-------------|--------------|----|----|----|
| Bwongyera | Iterero     | Nyakasharara | 11 | 42 | 5  |
| Bwongyera | Katomi      | Bwongyera    | 12 | 88 | 11 |
| Bwongyera | Kitojo      | Rwamarebe    | 13 | 38 | 5  |
| Bwongyera | Kyabashenyi | Rwenkuba     | 14 | 64 | 8  |
| Bwongyera | Kyaruhuga   | Kishariro 1  | 15 | 84 | 10 |
| Bwongyera | Rwanda      | Rutezo       | 16 | 43 | 5  |
| Rugarama  | Kagongi     | Kagyeyo 1    | 17 | 59 | 7  |
| Rugarama  | Kakanena    | Kakanena 1   | 18 | 80 | 10 |
| Rugarama  | Kagongi     | Murambi      | 19 | 86 | 10 |
| Rugarama  | Ngomba      | Rwentunda 11 | 20 | 55 | 7  |

|          |            |               |    |     |    |
|----------|------------|---------------|----|-----|----|
| Rugarama | Nyakabungo | Ibare         | 21 | 95  | 11 |
| Nyakyera | Kiyooro    | Nyakasa       | 22 | 96  | 12 |
| Nyakyera | Ngoma      | Nyakanengo    | 23 | 84  | 10 |
| Nyakyera | Kibingo    | Kigarama      | 24 | 159 | 19 |
| Ruhaama  | Kafunjo    | Sofia Town    | 25 | 199 | 24 |
| Ruhaama  | Kishami    | Kyakashambara | 26 | 245 | 29 |
| Ruhaama  | Ruhaama    | Nyakagando    | 27 | 122 | 15 |
| Itojo    | Buhanama   | Nyakabare     | 28 | 36  | 4  |
| Itojo    | Itojo      | Kikunyu       | 29 | 78  | 9  |
| Itojo    | Nyongozi   | Ishunga       | 30 | 113 | 14 |



## Attachment 2

### List of Enumerators and Supervisors

| Name                 | Position/place of work                                 |
|----------------------|--|
| 1. Turyagira Shebah  | HMIS Focal person-Ntungamo District                    |
| 2. Komwezi Agatha    | E/N-Ntungamo H/U                                       |
| 3. Bombona Loy       | Accounts Assistant-Rushenyi HSD                        |
| 4.Asiimwe Dorothy    | E/M- Itojo Hospital                                    |
| 5. Bamwine Fred      | Records Assistant- DDHS –Office                        |
| 6. Leocardia Mugisha | R/N&M Patience Domiciliary Clinic-NtungamoTown/Council |
| 7. Nabuloli Leah     | Health Assistant-Rubaare Sub-county                    |
| 8. Bwendero Apollo   | Reproductive health Coordinator-DDHS= Office           |
| 9.Akankwasa Johnson  | Health Assistant-Ntungamo Town Council                 |

|                        |   |
|------------------------|---|
| 10.Byabashaija k Johns | Nursing Assistant-Kitondo Health Center |
| 11. Katyokori Jane     | Enrolled midwife-Kiyoora health center  |
| 12. Byamukama Topher   | Health Assistant-Nyakyera Sub-county    |
| 13.Bamanya Donald      | Clinical officer-Itojo Hospital         |
| 14.Namanya Oliver      | Health Inspector-Ruhaama County         |
| Ndyanabo James         | TBD coordinator-DDHS= Office            |
| Twesigye Francis       | DHE-Ntungamo District                   |